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your own hunger by giving your dog a bone.

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To be *Self-Reliant,* nerves must have a food-tonic that nourishes and builds up the entire system.

Scott's Emulsion

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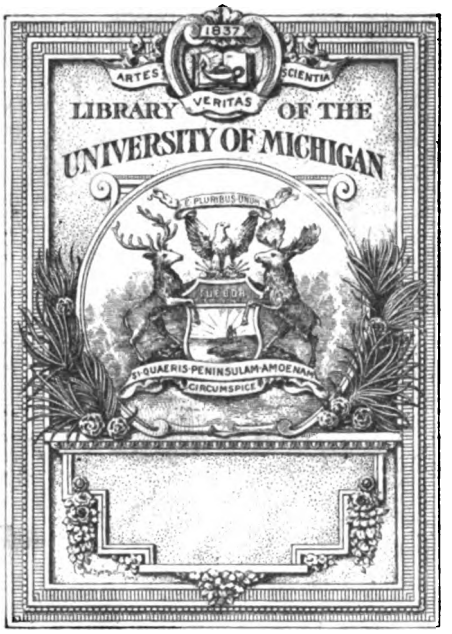
ALL DRUGGISTS



Vol. IX JANUARY, 1912 No.

Journal of the OUTDOOR LIFE

THE ANTI-TUBERCULOSIS MAGAZINE

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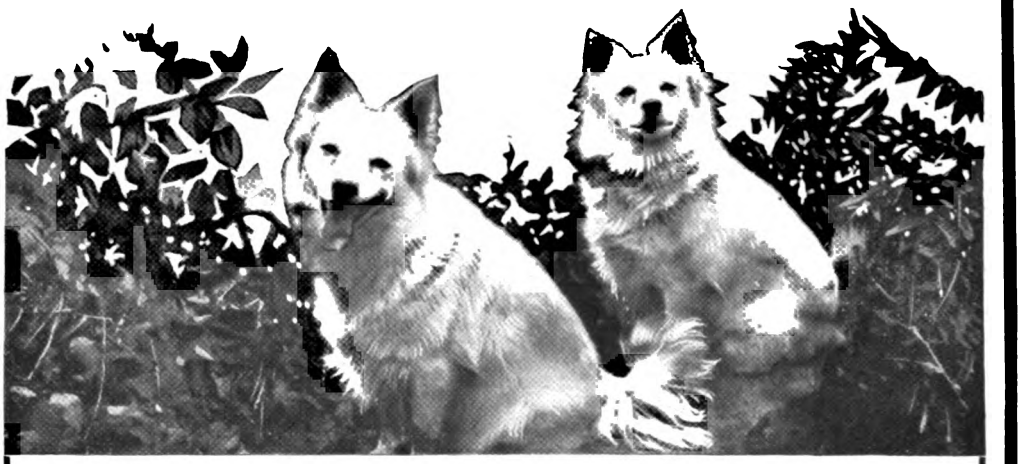

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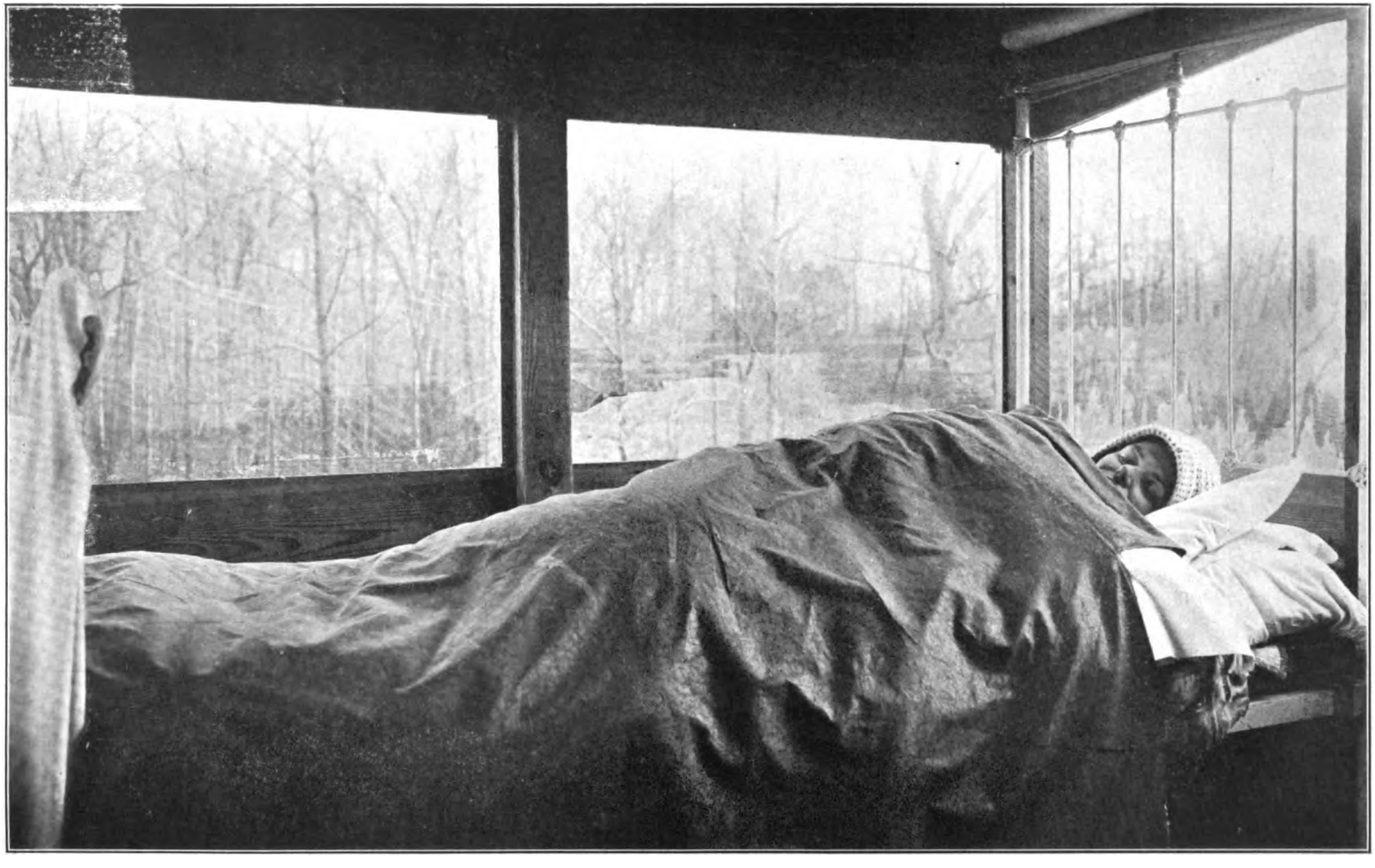


"WHEN DEEP SLEEP FALLETH ON MAN"

Vol. IX SEPTEMBER, 1912 No. 9

JOURNAL OF THE
OUTDOOR LIFE

THE PRESENT STATUS OF THE MOVEMENT FOR THE PREVENTION OF TUBERCULOSIS IN NEW YORK STATE*

BY HOMER FOLKS,

SECRETARY OF THE STATE CHARITIES AID ASSOCIATION

This morning the civilized world held its breath and looked out over the Atlantic a thousand miles to the spot where 1,500 souls went down to death yesterday. Would that we could similarly concentrate interest on the fact that in the Empire State alone each month a like number of human beings go down to death because of tuberculosis! Like the passengers of the Titanic, they come from every walk of life—first, second, and third class—but go down to death equals. It is not even permitted to us to save the women and children, or to give them the first chance.

When the wireless call reached the rescuing boat, some 170 miles distant, pushing at full speed, it took some eight hours to reach the scene of the disaster. It must have seemed a long time, and yet the distance and the time were as nothing compared to the distance and the time separating the sufferers from tuberculosis from their would-be rescuers. It is many times further, for example, from the lower East Side to the City Hall than it was from the Titanic to the Carpathia. It takes as many years to get help from headquarters to the poorer sections of our smaller cities and rural districts as it did hours to get to the Titanic—only in this case we are contending not against the forces of nature, not against the limitations of mechanics, but against the ignorance and indifference of men.

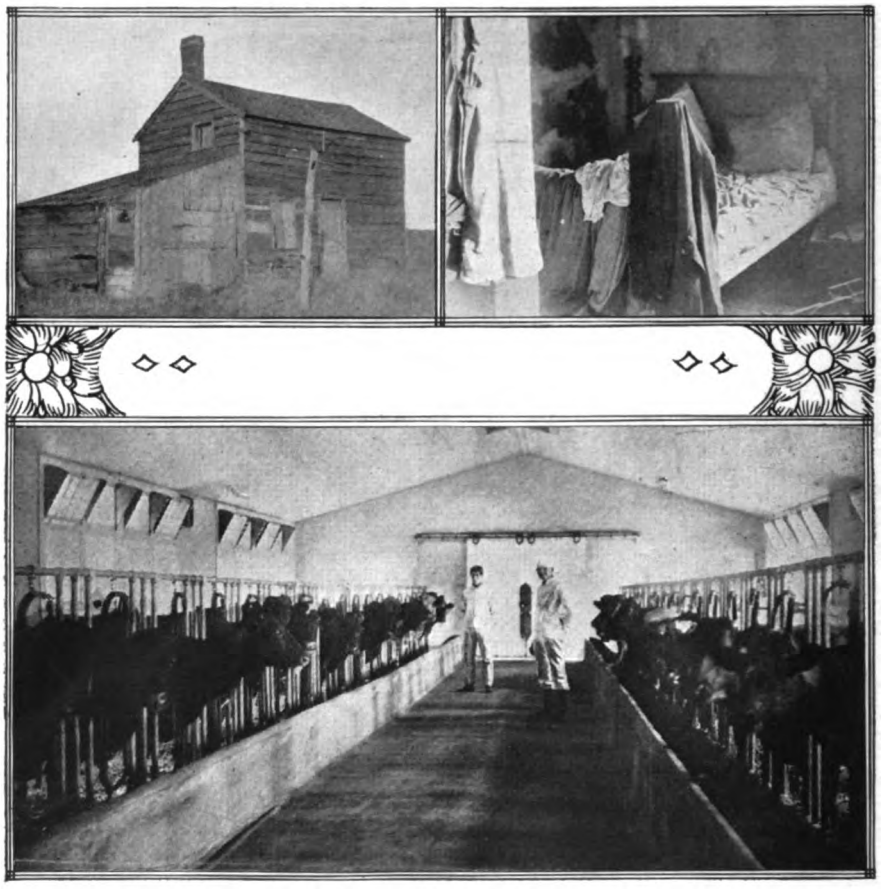
The mists and fogs of the Newfoundland banks are clear sunlight compared with the confusion and misunderstanding separating human beings from each other, paralyzing the natural flow of sympathy for the distressed, and staying the strong right arms of those able to help. May the deep feeling and sense of human unity evoked by the dramatic loss of the Titanic remain a permanent asset of the humanitarian forces of the world.

Various measures looking toward the prevention of tuberculosis were taken by the health department of New York City, by individuals and societies of the medical profession, and by other agencies several decades ago. It was not, however, until 1902, ten years ago, that a permanent central committee, representing both the medical profession and the laity, public officials and private citizens, was organized to coordinate existing agencies and to push the movement in all its aspects with renewed vigor and determination in New York City. Similarly, here and there throughout the State, a public health officer, a good citizen, or perchance a medical society, for a period of several decades have seen the great opportunity to control the greatest cause of death, and have taken a hand. It was not until 1907, however, five years later than in the City of New York, that a central committee to push actively the various measures for the prevention of tuberculosis in all parts of the State was organized. The State Department of Health and this Committee on the Prevention of Tuberculosis of the State Charities Aid Association have since that time pushed the movement energetically in every county of the State. Certain sharp distinctions in the conditions under which these two movements are carried on stand out clearly, all of them making for greater facility of accomplishment in the metropolitan city. In New York City we have one health officer with a staff of experts and laboratory assistants; in the remainder of the State, with substantially the same population, we have

* An address before the New York State Medical Society, Albany, N. Y., April 16, 1912.

fourteen hundred health officers, representing all degrees of proficiency and largely without staff, combining in their own persons administrative, educational, and expert resources. In New York City we have one city government to provide the needed funds; in the remainder of the State we have 57 counties, 48 cities, and hundreds of villages and towns, each of which must be interested and brought to the point of action. In New York City we have the centralized financial resources of the country; elsewhere we have the more slender resources of private generosity. In New York City we have a great health department, with prestige, authority, accustomed to act and to have its action accepted by the community; elsewhere we have, as a rule, health officials struggling for the bare necessities of administration and fearful of offending public opinion.

Notwithstanding these inherent and irremovable difficulties in the situation, a very substantial degree of progress has been attained. Being far better acquainted with the details of the movement outside of New York City, I shall speak chiefly of that.



UNCARED-FOR HUMAN BEINGS AND CARED-FOR CATTLE

New York State which enforces laws for the protection of cattle, permits men to die, uncared for, from a preventable disease. The "house" at the top, left, was the last home of a man dying from tuberculosis. His eight-year-old girl was his only attendant. Top right shows his bedroom. She slept in the attic in a box. The bottom picture is that of a model dairy.

First, as to hospital care. In 1907, comparatively little stress was laid on hospital provision as a preventive agency. After the International Congress on Tuberculosis in October 1908, however, that became the most important single objective. In 1907 there

were, all told, seven agencies offering hospital and sanatorium provision for tuberculosis outside of New York City—three private sanatoria, the State Hospital for Incipient Tuberculosis at Ray Brook, the Municipal Hospital at Rochester, and the almshouse hospitals in Erie and Westchester counties. These seven agencies had a combined capacity of 444 beds. To-day there are 22 hospitals in actual operation in the portion of the State outside of New York City, with a total bed capacity of 1,276, as against 444 in 1907. Besides these fifteen hospitals actually opened since 1907, eleven additional county hospitals with a total prospective bed capacity of 676 are definitely assured, six of these counties having selected sites and being engaged at the moment in the consideration of plans and specifications; and the other five having taken definite and conclusive action on the project and being now engaged in the selection of sites. Five additional cities have definitely authorized the construction of municipal hospitals with a total prospective bed capacity of 467, a total additional bed capacity definitely assured of 1,143.

Second, as to dispensaries; from the beginning it has been recognized that one of the chief factors in the prevention of tuberculosis is what, for want of a better name, we call the tuberculosis dispensary, the outpost from which cases are discovered or to which they find their own way; at which they receive examination, information and advice, and from which they may secure free admission to suitable hospitals, if such be available, or some degree of sanitary oversight and assistance at home. In 1907 there were two such dispensaries in the State of New York outside of New York City, in Yonkers and Rochester. To-day there are twenty-three special tuberculosis dispensaries in actual operation, some of them carried on by municipalities, some of them temporarily by tuberculosis committees.

Third, as to visiting nurses; our experience during the last few years has led us to place vastly increased emphasis on the visiting nurse as one of the most important factors in the tuberculosis movement. At first we thought of her chiefly as a useful adjunct to the tuberculosis dispensary, as one who, starting from that point, would visit patients, instruct them and their households under the physician's advice, and, in suitable cases, assist in securing hospital admission. We have come to see, however, that the visiting nurse is vastly more than this; that she is in fact one of our most valuable agencies in finding out where the vast numbers of uncared-for tuberculous patients are. Much stress has been laid on the registration of cases by physicians, and justly so; but, if every physician in the Empire State to-day reported all cases under his professional care, an overwhelming majority of cases would still be unrecorded, unknown and uncared for. The assumption that most sick people

CARED-FOR TUBERCULOSIS AT A COUNTY HOSPITAL

are receiving medical treatment is contrary to the fact. Save for the small proportion who enter hospitals, vast numbers of wage earners, farmers, and persons of moderate means do not know when they need medical treatment; or, if they do recognize the fact, do not act upon it so long as they are able to carry the burden of the day's work. The visiting nurse has proved to be a more effective agency in securing registration of cases than the dispensary, the exhibit, or the medical profession. She goes out into the highways and hedges and compels them to come in. If she has initiative, resourcefulness, tact and energy, it does not require much compelling. By getting closely into touch with patients already known, by listening to the household gossip, by interviews with teachers, by attending meetings of all sorts of social agencies, and in countless other ways which her ingenuity devises, she finds out where at least the advanced cases are, finds her way to them and brings them into touch with the chain of relief and professional agencies

established for their benefit and care. In no other respect has the degree of success been so encouraging as in this, at least during the past five years. In 1907 there were two visiting tuberculosis nurses outside of New York City; to-day, there are 49.

Fourth, I speak of special family relief. It was early recognized that adequate charitable relief is a prime requisite. A sick man, able to do some work, will not desert his post unless his family are to be cared for. The instruction which the visiting nurse gives cannot be carried out in the households of the poor, as a rule, unless additional facilities are provided. The patient obliged to remain at home, cannot husband his remaining resources of strength and vitality without food

TWO COUNTY HOSPITAL RESULTS

Father and child on the road to recovery at a County Tuberculosis Hospital

and shelter other than that which would ordinarily be given to the poor. In 1907 the number of localities in which special relief was provided for families in which there is tuberculosis, was two. In April 1912, it is twenty-seven.

Fifth, as to registration; the reporting of cases of tuberculosis by physicians to health authorities, required by the Sanitary Code in New York City for many years, was made mandatory for the medical profession in the State at large by the tuberculosis law of 1908. Substantial progress has been made under that law, though far less than I wish I were able to report. Such reports had been requested by the State Health Department prior to 1908. The number of living cases of tuberculosis reported to health authorities by physicians in New York State outside of New York City has been as follows: 1907—2,576; 1908—3,310; 1909—5,639; 1910—5,557; 1911—8,786.

In 1909, for the first time, the number of cases reported exceeded the number of deaths. In 1911 it was more than 1½ times the number of deaths. In view of the fact that there are somewhere between five and ten living cases for each death, it is painfully apparent that the number of cases reported, though substantially increasing, is still not more than one-fourth of what it should be. I wish that from this State Medical Society there might go out from every physician in the State of New York an urgent message requesting him to be not only a good physician, but a good citizen and a good sanitarian, by faithfully observing the requirements of the statute and reporting all his cases of tuberculosis to the health authorities. The medical profession has given such hearty co-operation in every other aspect of the movement that we have not the heart to speak with violence or bitterness of their degree of failure thus far in the carrying into effect not only the plain duty, but the plain letter of the statute requiring registration.

Sixth, concerning sanitary supervision. Registration is but a means to an end; that end is the effective sanitary supervision of cases of tuberculosis who, for any reason, must remain at home, and the removal to hospitals of such as can go there. This duty of sanitary supervision is to be performed by the reporting physician, if he chooses, or by the health officer if the physician so prefers. This alternative was provided out of deference to the position and possible wishes of the attending physician. I wish that in every case he would choose, however, that this sanitary supervision be exercised by the health officer. In but few cases does the physician visit his patient with sufficient frequency to know whether sanitary precautions are being observed in the household.

Seventh, as to popular education; I have left to the last, though it is perhaps the most important factor in the movement, and also the most difficult to measure, *i. e.*, the bringing home to people of all sorts and conditions, in all parts of the State, of the essential facts about tuberculosis. This campaign of popular education has a double purpose—to bring the individual to a point at which he will recognize the early symptoms of tuberculosis in himself or associates, and to create a public opinion which will sustain public officers in making those expenditures, and taking those administrative measures which are essential for the control of tuberculosis. In this educational movement the State Department of Health has co-operated closely. The large exhibit of that Department will have been shown by May, 1912, in every city in the State. Smaller exhibits have visited the greater number of the towns and villages, and have gone to the county fairs throughout the State. No precise measurement of such

educational work can be applied. It can be said, however, that the number of copies of the leaflet stating the essential facts about tuberculosis, actually placed in the hands of individual people in the State outside of New York City during the past five years, is counted not by the hundreds, not by the thousands, but by the millions. The number of local committees, that is, village, city or county committees, organized at the close of tuberculosis exhibitions to continue and to push the tuberculosis work in their respective localities, is 263, with a total membership of public-spirited citizens of 8,816. A sidelight on the effectiveness of such an educational campaign is shown by the recent election in the city of Seattle. There, among thirty-four different propositions submitted to the voters of the city at the recent election, one proposed an issue of bonds to the amount of $125,000 for a tuberculosis hospital. That, in a city of 250,000 people, would be the equivalent of a bond issue of $2,500,000 in the City of New York, or of the same amount in the portion of New York State outside of New York City. This proposition received a larger affirmative vote than any other proposition of any other nature or character whatever going before the people. 39,014 people voted for it, and only 8,831 against it, an affirmative vote of more than 4 to 1. It is evident that in this respect at least, the men of Seattle, as well as the women, did their duty.

BEFORE AND AFTER

Picture on left is that of a patient three weeks after being admitted to County Tuberculosis Hospital. On the right is the same boy eight months later, nearly ready to return to his home and friends. Note the well-filled coat in the picture on the right and compare it with the pitifully baggy trousers in the picture on the left.

It is inevitable that those active in the movement and the public at large should begin to ask, "Does the actual death rate

show any evident effect of all this work?" I wish I could say that it does. I do not think, however, that such is clearly true. The death rate from tuberculosis is falling off both in the city and in the State. It had been falling, however, before this movement was begun, and I do not see that we can claim that as yet the decrease has been notably accelerated. The number of deaths from pulmonary tuberculosis in New York City and in the portions of the State outside of New York City, from 1900 to the present, as shown by the annual reports of the State Health Department is as follows:

Year.	Greater New York No. of deaths.	State of New York No. of deaths.
1900	8162	5429
1901	8141	5625
1902	7589	4993
1903	8003	5191
1904	8516	5642
1905	8532	5527
1906	8976	5051
1907	8996	5410
1908	8867	5449
1909	8645	5303
1910	8692	5208
1911	8790	5389

The conclusions to which some study of these figures leads me are these:

1. The irregular variations from month to month and from year to year, suggest very strongly to me that we have not yet arrived at a complete, prompt, and accurate recording of the actual numbers of deaths from this cause.

2. That one of the first results of a campaign of education is apt to be an apparent increase in the number of deaths recorded as being due to pulmonary tuberculosis, because of a more accurate diagnosis, and less readiness to ascribe a tuberculosis death as due to some other cause out of consideration for the family or the attitude of an insurance company.

3. That the constructive measures for the prevention of tuberculosis have not yet been in operation for a sufficiently long time to show any marked effect on the actual number of deaths.

I am one of those, however, who confidently expect to see, within the next decade, a very evident and substantial decrease. I accept the hopes expressed by Phillip of Edinburgh in his cable message concerning the program for anti-tuberculosis measures adopted by the conference of Tuberculosis Committees in Albany in March 1910:

> "Prosecute great campaign proposed; watch child as potential tuberculosis seedling; correct faulty compulsory environment, and expect forty per cent. reduction by 1920, and practical disappearance within a generation and a half."

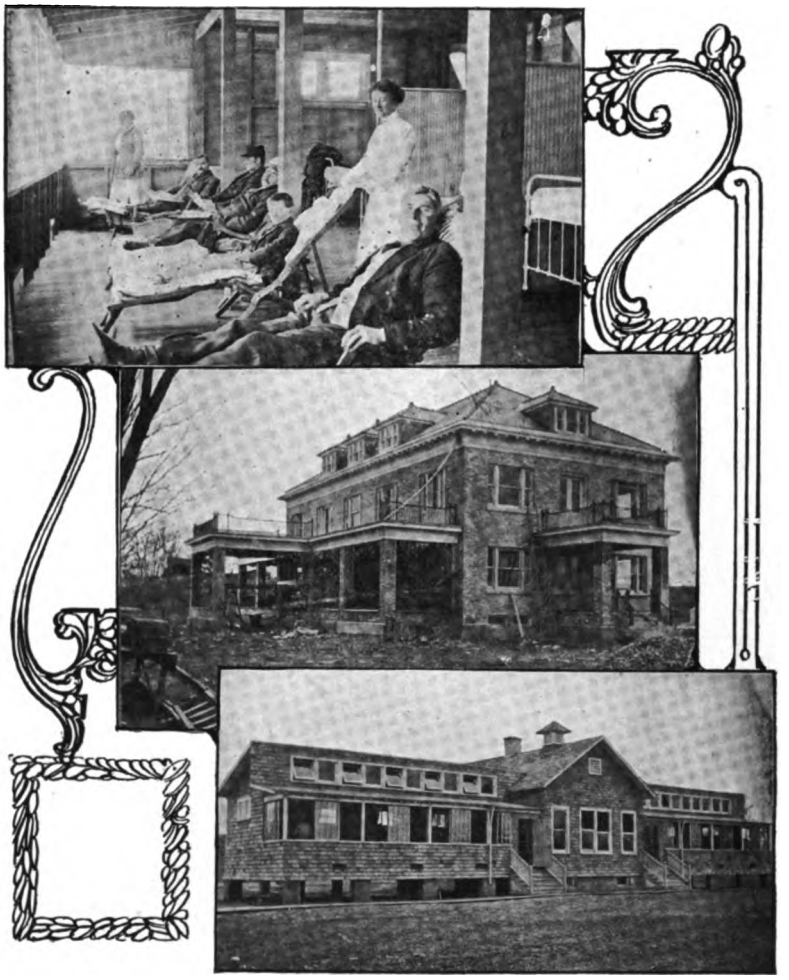
One of the most important indirect effects of the tuberculosis campaign is a changed attitude on the part of the community toward the medical and nursing professions. We are, it is true, putting new duties upon physicians, but we are also educating the community to appreciate its physicians and nurses and to employ them. This employment in the tuberculosis cause is rapidly coming to be public employment. We recognize that the patient, irrespective of the amount of his resources, should be cared for, not only for his benefit and protection, but for ours. Just as we pay school teachers out of public funds to make us wise, we are learning to pay physicians and nurses out of public funds to keep us well. I am not prepared to say that at this time we should go as far in making physicians public servants as we should in the case of trained nurses, though the lamentable fact is that the rich and the very poor are the only groups receiving adequate medical treatment at present. The wage earner, who shuns the pauper's oath as worse than death itself, does not obtain adequate medical advice and treatment, or, if he does obtain it, it is at an undue sacrifice.

Not many years ago something of the same was true of education. High tuition charges in private schools cut off a large proportion of the population from educational advantages. The public school system, and even publicly supported colleges and universities, supplemented by private generosity, have changed all this, and education is now the privilege of all. The hospital, the visiting nurse and the dispensary are important for the prevention of tuberculosis, but they are also important for the care and prevention of other diseases. To a considerable extent these activities are now carried on through private philanthropy, but even the demands of the tuberculosis cause are rapidly carrying them beyond the resources of private charity. More and more the dispensary, the hospital, and the visiting nurse are becoming public enterprises of the town, the village, the county, or the city. At least nine cities outside of New York employ a special tuberculosis nurse, and pay them from municipal funds. These are Amsterdam, Buffalo, Cohoes, Dunkirk, Syracuse, Hudson, Rome, Schenectady and Niagara Falls.

The time has come, in my judgment, when legislation should be had requiring the employment in every city and town of the State, paid from public funds, of a visiting nurse, for each suitable number of population. The State Grange, representing more than 100,000 farmers, recently adopted a report recommending the employment by local granges of visiting tuberculosis nurses until such time as they could be taken over by the local public authorities. The State Federation of Women's Clubs, representing 223,000 members, has undertaken similar work in a number of the cities and villages. These straws indicate the direction in which the wind is blowing. It is a short step from the performance of public health work by such

large and influential groups to its assumption by the largest group of all,—the people of the respective cities, towns and villages of the State. The indirect contribution to the public health movement made by the tuberculosis campaign may easily prove to be its most important result.

dispensaries, visiting nurses and hospitals already provided or under way, we are now able to hold out definite encouragement that, if we keep up good courage, continue to increase the number of active supporters of the movement, and do not lose any of our enthusiasm or determination, we shall by the



GLENRIDGE SANATORIUM

Schenectady County's Tuberculosis Hospital. Top picture—Patients resting before supper. Middle picture—Administration building (under construction). Bottom picture—Pavilion for male incipient cases.

When in March 1910, at a conference of local tuberculosis committees, held in Albany, a program of constructive measures, summed up in the phrase, "No Uncared-for Tuberculosis in 1915," was adopted, it was an expression of hope and determination rather than a prediction. From the numbers of end of 1915, be able to announce the realization of our hopes. We shall, of course, be far from the end of our efforts, but we shall have set into action on a reasonable and adequate scale all those agencies which you men of medicine and of science tell us will accomplish the desired result.

REST IN THE TREATMENT OF PULMONARY TUBERCULOSIS*

BY JOSEPH H. PRATT, M. D.,

BOSTON, MASS.

In the treatment of consumption little things are great and the little thing that is greatest is rest. On the cover of the record book in which each of my tuberculosis patients writes down the details of the day is printed this sentence: "Rest in the open air is the medicine that cures consumption." This has been the guiding principle in the work of the Emmanuel Church Tuberculosis Class since its organization in July, 1905. The success we have had during the six years of its existence must be attributed in large measure to the rest treatment. The patients were all poor and they lived in a large city situated on the seacoast in a harsh and supposedly unfavorable climate. Dr. Osler, who has examined our records, says in the latest edition of his text-book that better results have never been published.

The wave of pessimism regarding the curability of consumption that is now sweeping over the country is an unpleasant contrast to the confident optimism of a few years ago and is equally unjustified. To-day I read in a report just issued by the Social Service Department of the Boston Dispensary that "home treatment of the positive active case, which was never considered more than a makeshift for something better, has practically been abandoned."

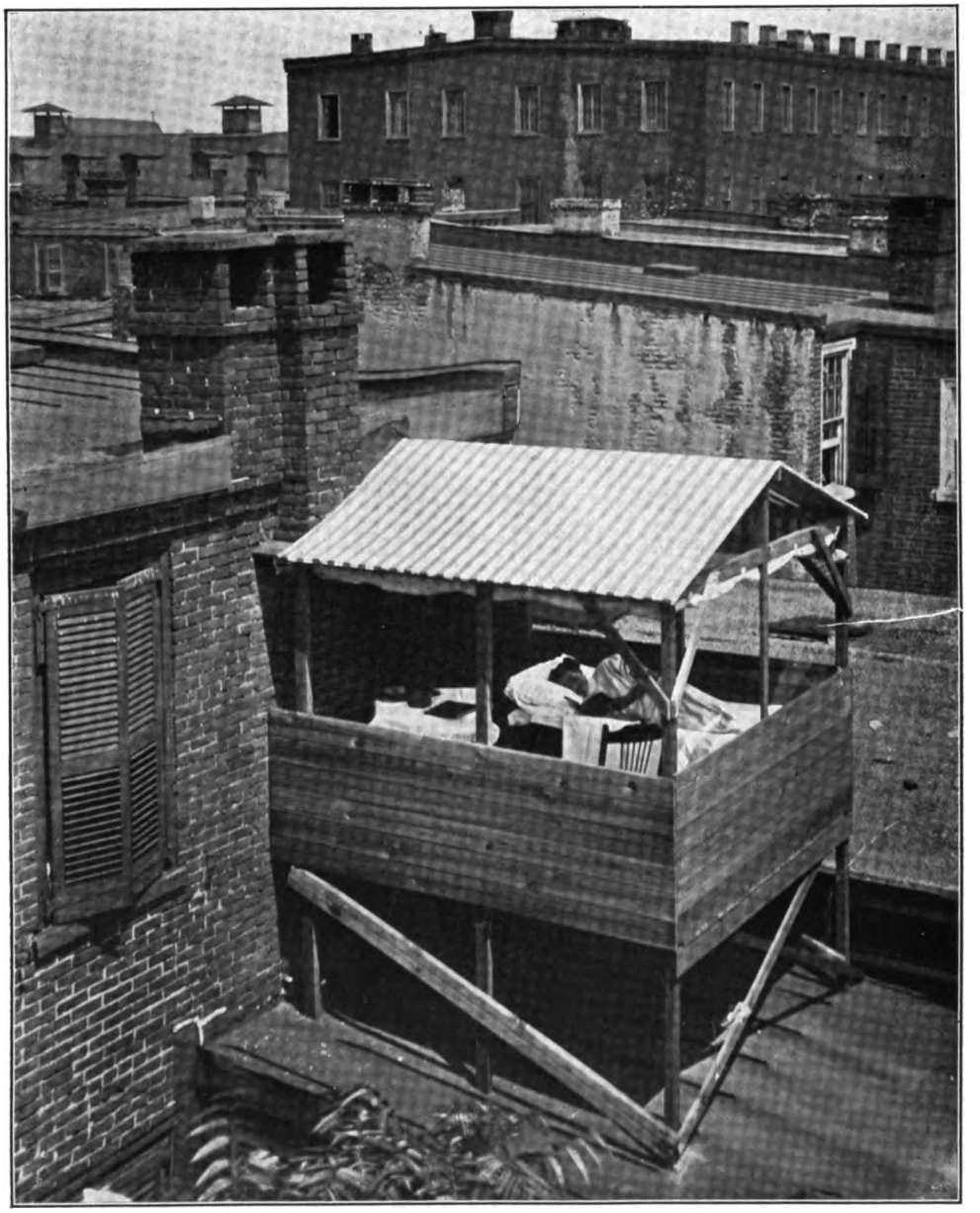
It seems only yesterday that lecturers and writers active in the tuberculosis campaign were giving the public the idea that a dispensary or a day-camp, with milk and eggs furnished to the needy, and instructions in regard to fresh air and disposal of sputum given to all, would offer a means of cure to the poor consumptives who were in the curable stage. Patients flocked to the dispensaries by the hundreds. Where are the vast majority of them today, and what do their families now think about the curability of consumption? The failure can be attributed mainly to two causes: First, the workers in the dispensaries and elsewhere forgot the words of Brehmer, the founder of sanatorium treatment, that consumption although a curable disease, is a difficult disease to cure; and secondly, they did not appreciate the importance of absolute rest and the danger of exercise in the active stage of the disease. Since the time of Sydenham, the great English physician, who lived in the seventeenth century, exercise has been advocated in the treatment of consumption. And with what result? Even to-day its dangers and the wonderful curative power of rest in the open air are not generally recognized.

Brehmer, although he recognized fully the importance of the out-of-door life, believed that the disease developed only in individuals who had small weak hearts. Misled by this theory he made his patients take long walks along the mountain sides with the object of strengthening the heart. He realized the need of carefully supervising the exercise, and the danger of over-exertion. In the last chapter of his work on the treatment of consumption, published in 1887, he gives the tragic story of a young American engineer who exhausted himself again and again by long walks and various forms of physical exertion under the mistaken idea that thereby his health would be restored. Relapse followed relapse, but blind to his folly this young man shortly before his death wrote a letter to a Glasgow journal in which he advised all consumptives to follow his example and take as much hard physical exercise as possible. He was convinced that the exercise had been very beneficial, and he believed it would have cured him if begun before his disease had reached the hopeless stage. Brehmer realized as we do to-day that this poor fellow advanced himself from the curable to the hopeless stage of the disease by excessive exercise.

Although no one has emphasized more clearly than Brehmer the danger of getting over-tired, this pioneer in the open-air treatment died unconvinced of the value of rest as a curative agent in consumption.

Dettweiler, an assistant physician in Brehmer's sanatorium at Görbersdorf, saw many patients injured by exercise. Stormy days, of which there are many in the mountains of Silesia during the winter, were spent indoors. Gradually the value of rest in the open air in the cure of consumption dawned upon the mind of Dettweiler. Later in his sanatorium at Falkenstein, he built resting-halls which were open on one side like our country horse-sheds. Here the patients spent many hours daily on the comfortable reclining chairs of Dettweiler's invention. At night the patients returned to their bedrooms, and "the window was usually not quite closed." Knowing the fear that still exists in Germany of draughts and night air, we are safe in concluding that at night the fresh air treatment was interrupted. The results obtained by this form of

* This article is reprinted from the June, 1911, number of the JOURNAL OF THE OUTDOOR LIFE, the entire edition of which is exhausted.



A ROOF TENT OPENING FROM A WINDOW

treatment were better, so far as I can discover, than those obtained by Brehmer or any of his followers.

One of the chief advocates of exercise has been Sir Hermann Weber of London, who as late as 1885 wrote as follows: "Exercise is one of the most powerful and essential means of cure. It is as necessary as air and food because it enables the invalid to take both in a sufficient quantity to improve the nutrition by taking up fresh material and removing the wastes and thus to fight a battle with a fair chance of success. Without exercise I should not like to treat phthisis." He advised riding on horseback, skating and tobogganing as useful exercise under guidance. He cautions against over-exertion. "One mistake," he says, "often destroys the fruit

of months and years of judicious management." What success did this distinguished physician obtain by his exercise-cure? Fortunately he published the results of nearly thirty years' experience with this form of treatment. Of his private patients 8% recovered and 21% were improved, while in his hospital practice only 2% recovered and 15% improved. Compare these results with those of Dettweiler as given by Dr. Lawrence F. Flick in a paper published in this country in 1890, the same year that Weber's statistics appeared. Of 600 patients 483 were improved, that is 66% improved, and excluding the advanced cases 81.5%. Results obtained by Turban, who used a stricter form of rest treatment than Dettweiler were even better. Among the patients treated by him, 80.4% of those admitted in the first stage, 48.8% in the second, and 17% in the third, were well one to seven years after their discharge from the sanatorium. So far as I can find, no such success has been attained by anyone who has employed exercise as a factor in treatment in the active stage of the disease. The widespread ignorance in this country of the harmfulness of exercise in the febrile stage of consumption is as shocking as it is surprising. Patients are still sent to Colorado for a change of climate and are told by their home doctor that when they arrive they should get out and "rough it." Dr. George R. Pogue, a Colorado physician, who writes in a way that carries conviction, says: "The few who survive this vigorous exercise are a small percentage of the number who employ it. I have been through it and I know whereof I speak. It took me two years to get over one day's duck hunting which I took on the advice of a physician who has since succumbed to the exercise cure." Pogue states that he has the histories of sixty-two patients with tuberculosis seen during a period of five years who took active exercise. Of this number forty-three died and only two showed a prospect of ultimate cure.

In the first people's sanatorium in America, established at Saranac Lake in 1884, by Dr. Trudeau, violent exercise was recognized as injurious and rest out of doors was enforced in all cases which showed any rise of temperature.*

Dr. Trudeau alone in the North Woods did pioneer work little influenced by the currents and counter-currents of German teaching. In a letter to me he says: "I was one of the first, if I remember, to advocate the rest cure, and for many years had to stand my share of abuse about it. I remember distinctly getting up in medical meetings and being sat upon on all sides by the gentlemen who said 'rest was very well, but how was a consumptive to keep up his appetite unless he exercised?' Then my own men here did not believe in it at first, and it took some time for them to accept the fact that the best way to treat a tuberculous process which shows any degree of activity is by rest. At any rate, I want you to know that I have always been thoroughly in favor of rest, and that even now I find myself standing out against the new doctrine of curing people by exercise. I cannot help but feel that although, of course, there are cases that are much benefited especially by graded exercise, the fact still remains that when a tuberculous process shows any degree of activity rest is the safest plan to follow. I know I have hurt nobody by rest, but I am quite sure I often have by allowing them to exercise. Perhaps this was due to want of caution on my part, but I should say, as I always have, when in doubt it is safer to rest your patient, and I know in this you will agree with me."

One of the few American writers who have endorsed and adopted the methods of Dettweiler in this country is Dr. Babcock of Chicago whose text-book on Diseases of the Lungs contains an admirable article on rest in the treatment of phthisis.

The rest halls which are such a prominent feature of the European sanatoriums are rarely found in connection with American institutions.

Rest and exercise are relative terms and so different are the generally accepted views in America from those held on the continent of Europe that even some of our writers who have emphasized the importance of rest, such as Stanton and Pogue, would be regarded in Europe by the chief advocates of exercise as extremists who permitted exercise when rest was indicated. Stanton would allow a patient to be out of bed the greater part of the time if the afternoon rise in temperature is only to 100°. He would begin exercise when the evening temperature was under 100°. Pogue, from whose paper I have already quoted, says that by rest he does not mean actual confinement to bed, except in those cases in which there is a very acute process accompanied by high fever and rapid pulse.

Paterson, whose employment of graduated labor at the Frimley Sanatorium in England has aroused so much interest, follows definite rules in regard to rest which his imitators in this country would do well to follow. The Frimley Sanatorium, it should be understood, admits only carefully selected patients who have had at least three months' treatment in the Brompton Hospital. "If the temperature has been 99° F. (mouth) or over during the week preceding the admission to the sanatorium the patient is put to bed so long as the temperature remains at 99° in the case of men, or 99.6° in the case of women. . . .

* In the JOURNAL OF THE OUTDOOR LIFE for June, 1911, I stated that Dr. Trudeau was a follower of Brehmer rather than of Dettweiler. This was the inference I drew from his interesting article in the first volume of the *Zeitschrift für Tuberkulose*, but it was not correct.

After the temperature has been normal for a week or ten days the patient is allowed up for dinner, but returns to bed as soon as the meal is finished." Paterson's results show that many arrested cases of tuberculosis can do heavy work for at least a limited period of time without injury provided there is very careful supervision and the "danger signal," that is a temperature of 99°, is not overlooked. The most recent advocate of graduated exercise in the treatment of tuberculosis is Philip of Edinburgh, who has followed the same methods as Paterson. No definite results have been published, and there is nothing in his paper that would lead one to expect that graduated labor would yield as good results as the prolonged rest treatment in the open air.

Advocates of exercise have long been in the habit of supporting their opinions by theories rather than by facts. There is no definite evidence that the toxins discharged into the circulation by exercise have a beneficial effect. It seems more probable that these bodies increase the susceptibility of the tissues than that they confer immunity. It is interesting to note that the latest paper on this subject published by one whose knowledge of immunity gives value to his opinion, Cobbett of Cambridge University, strongly favors the view that rest rather than exercise promotes recovery. As Cobbett puts it, "the cause of recovery from infectious disease is the acquisition of specific immunity," and "resistance to tuberculosis like resistance to other infections is a very specific matter and does not necessarily go hand in hand with what is regarded as the general bodily health."

So much for theories. From personal experience I am absolutely convinced that under the strict rest treatment out of doors patients recover more frequently and more quickly, and that relapses are less common than under any other form of treatment. To those who are inclined to doubt this statement I would give the same advice that John Hunter gave to Jenner, "Don't think; try," and I am tempted to finish the quotation, "be patient, be accurate," for months of rest may be necessary and the effect of exercise must be accurately observed.

During the past seven years we have treated in the Emmanuel Church Tuberculosis Class 139 patients, not including the present members. Twenty patients were referred to sanatoriums and hospitals after they had been under treatment a varying length of time; eleven moved to other parts of the country. Fourteen left the Class against advice; nine of these patients were so much improved that they considered themselves well and refused to continue the treatment. Eleven were discharged for disobedience. Of those who followed the treatment faithfully the disease was definitely arrested in 75 cases and wage-earning power was restored. Of this number 69 were well and able to work on June 10, 1912. Twenty-nine patients were admitted in the first stage of the disease and all recovered. There were twenty-seven recoveries in the second stage and no deaths. In the far advanced stage the disease has been arrested in eleven patients and nineteen have died. Among the seventy-five who left the Class with the disease arrested only four deaths have occurred. Four relapsed during the past year and are again taking the treatment in the Class. Among those sent back to work from 1906 to 1911 there were eight in whom symptoms returned. Six of these recovered a second time in the Class and are now at work. That the results are even better than those of Dettweiler and Turban is explained by the fact that, from the outset, appreciating the importance of Millet's discovery of the value of night air, nearly all our patients spent their nights as well as their days in the fresh air out of doors. This enabled us to use with benefit a more prolonged rest treatment in bed than that advised by Dettweiler. The strict rest treatment has been continued until all symptoms indicating activity of the disease have disappeared. In one far advanced case no exercise was allowed, except weekly visits to the class meeting, for a period of twenty-three months. It would be natural to suppose that, at the end of twenty-three months without physical exercise, the muscles would be weak and the patient would be simply overloaded with fat and in poor physical condition. When he entered the class he weighed 115 pounds and at the time of which I speak his weight had increased to 146 pounds. His child was suddenly taken ill and it seemed necessary for him to help in the housework. For over a month he worked several hours a day without any bad effects. The work did not tire him and his weight after an initial fall of two pounds during the first week remained constant. He recovered completely and has now been working a year. Last summer he did hard work every day on a farm and lost no weight.

The progress toward recovery may be slow, but it is usually steady and uninterrupted. In the treatment of far advanced cases a year or more of rest may be required. I do not know why the heart and body muscles do not become weak, but it is a clearly demonstrable fact that patients actually become stronger, and I have never seen circulatory disturbances result from long continued rest in the open air. The increase of muscular strength was strikingly shown by a patient who on the day he began the rest treatment could scarcely drag himself up the steep hill that led to his house. After a month's rest in bed he started for his first class meeting, but he had not left the house many minutes when he remem-

bered that he had forgotten his record book and without any difficulty climbed the hill that had tired him to the point of exhaustion a month before.

Absolute rest is indicated in non-febrile cases, if symptoms of activity are present; and I have demonstrated repeatedly that it yields remarkable results. That exercise may lead to extension of the disease in patients who have no fever, I have convincing evidence. That exercise is a two-edged sword whether one believes in graduated exercise as a therapeutic measure. The rest that follows the trip probably prevents serious injury, but I believe that in a few instances it has delayed recovery.

In private practice I have seen as good results from prolonged rest in bed out of doors as in the tuberculosis class. The superiority of the rest treatment over the ordinary hygienic-dietic treatment was never more strikingly shown than in the following case. In

AN EXCELLENT FORM OF ROOF CHALET FOR USE IN HOME TREATMENT. BY RAISING THE CANVAS SIDES, PROTECTION FROM THE WIND AND RAIN MAY BE SECURED

is admitted even by those who advocate it. Everyone with experience in the treatment of consumption warns against over-exertion. Yet no one can tell how much exercise can be taken in the active stage of the disease without danger because the amount of exercise that will produce fatigue varies with each patient. If unavoidable exertion is followed by rest in bed for several days, harm usually can be averted. The visit of patients to the class meeting is quite unjustifiable on theoretical grounds, whether one holds that exercise is harmful in active tuberculosis or

the fall of 1908 I was consulted by a gentleman aged forty-three, who complained of loss of appetite and weakness. He had been treated the entire summer by a specialist in stomach diseases, but without any improvement. His past history was interesting and instructive in connection with the question of the relative value of rest and exercise. In 1892, after an attack of "influenza," he lost weight and strength. About six months later a cough developed insidiously. He was told by his physician that his lungs were slightly affected with tuberculosis. The patient took

the climatic treatment—first in Colorado Springs and then in California. In 1894 his cough and expectoration almost ceased. Over-exertion was followed by a return of the symptoms. He became weak and ill. His weight dropped to less than a hundred pounds, and the fever became continuous. A consultation was held and he was told that the only thing that could possibly save him was the climate of Switzerland. Although in a far advanced stage of the disease he was taken from California to Switzerland. Fortunately he was placed under the care of a wise physician who knew the value of absolute rest, and to him, rather than the climate, this patient owes his life. The treatment was rest and feeding. For a year after his arrival in Switzerland the fever persisted, but he gained during this period twenty pounds in weight. For two years he did not go to the dining room. He continued to improve, and after three years spent in Switzerland he went to England and entered a sanatorium. Here the exercise cure was followed. What was the effect on this patient? Although he gained in weight and reached a maximum of 130 pounds he began to have a slight fever after long walks. From that time onward he began slowly to lose ground. From 1901 to the time I saw him seven years later he lived a very quiet life. He gradually lost weight and strength in spite of taking excellent care of himself. His winters were spent in California. He rested several hours daily, and never went out in the evening. He always slept by an open window and never engaged in any business. Occasionally he would have a slight fever, but when he consulted me his temperature had been normal for four months. For years his appetite had been poor. On examination I found his temperature and pulse were normal. His weight was 111 pounds, the lowest it had been since leaving Switzerland. There was a slight cough and the sputum contained many tubercle bacilli. Now I would like to ask the advocates of the ordinary hygienic-dietic treatment what course they would recommend to such a patient? He had followed conscientiously the modern fresh air treatment and was slowly growing worse rather than better.

I placed him in bed out of doors under the care of a good nurse. There he remained from November 4th to March 16th, a period of twenty-two weeks. He left the hospital weighing 134 pounds, which was four pounds more than he ever weighed before. His appetite was fairly good and he felt much stronger. His sputum had decreased in amount, but tubercle bacilli persisted. I wonder if the critics of the rest treatment have ever observed the effect of more prolonged rest in a non-febrile patient. They would say: "Here is a man loaded down with fat. He is far from physiologically fit. With exercise he will lose weight rapidly." Such was not the case. This patient spent two weeks at Atlantic City taking gentle exercise and his weight increased to 138 pounds. Two years have passed and he continues to be in good health, although careful to avoid any over-exertion. When I saw him last January he weighed 133 pounds. He told me then that he came to town almost daily and that this winter he had been to the opera and theatre for the first time in twenty years.

I could cite the record of other patients equally encouraging. I will refer briefly to one case because I hope that others may follow the same treatment in similar cases. When I first saw M. O. in August, 1907, he was the picture of despair. After seven months' treatment in a state sanatorium he returned to his work as a letter-carrier. At the end of five weeks he was obliged to stop work on account of a profuse hemorrhage of the lungs; and from April to August, 1907, he had between forty and fifty similar attacks. They were sometimes so profuse that the attending physician feared he would die from loss of blood. He had no fever, however, and under the strict rest treatment he recovered and graduated from the tuberculosis class in February, 1908. When I last saw him two years later he said that he had not lost a day from illness and had not raised any blood. He is still well and working (May, 1911).

Prolonged rest in bed out of doors yields better results than any other method of treating pulmonary tuberculosis. Patients will have a better appetite and take more food without discomfort and gain strength and weight faster than patients with active disease who are allowed to exercise. Complications are much less frequent. When used in the incipient stage recovery is more rapid and surer. Many cases of moderately advanced tuberculosis that die under the "hygienic-dietetic" and the "graduated exercise" treatments can be saved by prolonged rest. The disease in a fair proportion of far advanced cases can be arrested, but it may be necessary to continue the rest treatment for a year or more.

After satisfactory progress has been made and the activity of the disease seems checked I allow patients to sit in a reclining chair one or more hours daily. Then they are permitted to take dinner with the family, and if this exertion produces no rise of temperature formal exercise is soon begun. On returning from a walk the rectal temperature is taken and observations are made every fifteen minutes for an hour if it is elevated. If it does not drop to 99.4 degrees in fifteen minutes the walk is interdicted or shortened. As accuracy of observation is all important it is necessary that the temperature should be taken by the rectum. At first the walk is of five minutes' duration. Every week it is increased five minutes until a half-hour's walk

is taken. Then the walk is lengthened more rapidly, but I rarely insist that a patient shall walk more than one or two hours daily. A cold rub by means of a wet mit, is given in the morning, at first by an attendant, later by the patient himself. Patients who are not very sick take a neutral full tub bath (90-95 degrees) of ten to fifteen minutes duration every afternoon. I allow patients without fever to go the lavatory if it is on the same floor.

That a specific immunity is established by the prolonged rest treatment is shown by the infrequency of relapses among patients who are taking exercise, and among those who have returned to work. Of the sixty-four discharged from the tuberculosis class with wage-earning power restored nearly all returned to indoor occupations. Some are compelled to work under unhygienic conditions. One patient is employed at hard labor in a foundry, another who had far advanced phthisis now works stacking books in the cellar of a publishing house.

In closing I wish to endorse the statement of the American physician, Hilleary, that I have never known rest, no matter how prolonged, to do any harm, while exercise brings more tuberculous patients to grief than all other things combined.

THE SLEEPING PORCH CRAZE A LA MOTHER GOOSE

Jack and Jill
Sleep out until
Their bed with snow all white is,
  Jack's nose
  And ears are froze
And Jill has caught bronchitis.

Shivery divery dide!
The family sleep outside.
  The craze struck Dad—
  It makes us mad
To have to sleep outside!

Hush-a-by, Baby, out in the storm,
What does it matter if Baby ain't warm?
When this fad's over, we'll all sleep inside,
And I hope of exposure my babe won't have
      died!

Little Bo-Peep
Has lost her sleep,
  The rising moon it wakes her,
And there she lies
  With open eyes
  Till early sunshine bakes her.

Move out my cot to the next vacant lot,
For this "Sleep-in-the-Open" fad I have got!
Mitts on my fingers and socks on my toes,
But long before morning I 'm perfectly froze!

There is a man in our town,
  And he is Nobody's Fool,
All summer he slept out of doors,
  Until it got quite cool;
But when he found his pillow wet
  With snow and hail and rain,
He jumped out of his breezy cot
  And slept indoors again!
—*Sarah Redington, in Harper's Magazine for April.*

THE RELATION OF THE PHYSICIAN TO THE ANTI-TUBERCULOSIS CAMPAIGN*

BY JAMES ALEXANDER MILLER, M. D.,

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The entire practice of medicine at the present time is in a stage of transition. Here as elsewhere in our modern life, it is a period of change and unrest.

The solemn pronunciations of the physician couched in unintelligible language have in the past been accepted as the will of fate, subject neither to change nor to criticism. This is true no longer and it is better so; but with the change the medical profession has lost a certain hold upon the community which was founded, perhaps more than was realized, upon a blind faith combined with a certain awe of a mysterious unknown.

Now, however, an enlightened laity knows that medicine is not always an exact science and that human ignorance and human failings are quite as general among physicians as they are among other men.

And, moreover, the restless search for fundamental truths has shown that the practice of medicine is really no mystery at all, but rather a rational system based upon simple facts, the application of which is not beyond the understanding of any intelligent and educated person.

Physicians themselves are primarily responsible for this change; for modern scientific medicine has discarded many cherished theories and has developed a new practice of medicine which consists largely in efforts for prevention of disease together with a much more restricted system of therapeutics, founded as far as possible upon a solid basis of scientific fact. Where scientific knowledge is wanting, modern therapeutics consist largely of an alliance with Nature herself, assisted by a rational appreciation of the simple truths of physiology and hygiene.

We are at present in a period of readjustment to these new points of view in modern medicine. Out of the confusion is already emerging the physician, no longer the high priest of mystery, but rather the guide and interpreter of certain natural phenomena of vital interest and importance to every individual. In this way the physician works with the patient, not by dictation, but through mutual co-operation and understanding. In simple language he defines the extent as well as the limit of modern knowledge and extends his influence as far as he may be able in his community, not only for the cure, but more especially for the betterment of hygiene and the prevention of disease.

Such, at least in its tendencies, is the modern practice of medicine, and with it must come, in some form or another, its expression in the wider sphere of what is somewhat opprobriously termed State Medicine. The health of each individual can no longer be considered simply a matter of personal concern, but quite as much one of public interest and responsibility.

This situation, whether we like it or not, we physicians must face, and if we are wise we will mould and direct these tendencies into sound and rational channels, rather than waste our efforts and discredit our profession by fruitless combat with the inevitable.

To some of us this change opens wide the door of opportunity for nobler and more efficient service, and in no branch of medicine is this so evident as in the anti-tuberculosis movement.

Our consideration of the relation of the physician to this movement may be covered separately in the six main phases of medical activity: Private Practice, Hospital and Dispensary Practice, Research Work, Public Health Service, Activities Connected with Civic and Philanthropic Organizations, and, last of all, as Citizens of the Commonwealth.

In Private Practice

The most trying need is for better medical training. Incipient tuberculosis as a clinical entity has been generally recognized only in recent years and is still largely neglected in medical teaching. In consequence, older practitioners are largely ignorant of the principles underlying the early diagnosis of this disease. This has resulted in widespread criticism from an aroused and enlightened public, and this in turn has fostered a lack of co-operation or even antagonism to the anti-tuberculosis movement on the part of many general practitioners.

This is most unfortunate, especially when we realize that to this body of men we must in the main look for the application of modern principles of diagnosis and treatment. The pendulum of denunciation of general practitioners, though perhaps deserved in large measure, has swung too far, and the integrity as well as the ability of individual

* Read before the Advisory Council of the Eighth Annual Meeting of the National Association for the Study and Prevention of Tuberculosis, Washington, June 30, 1912.

physicians has been falsely impeached for failures which are often due to lack of opportunity either in education or in experience, or both. The rise of a better equipped generation of younger practitioners must be recognized and greeted in deep satisfaction and warm welcome. The fetish that early diagnosis is a mysterious art only possible of attainment by the chosen few, should be discarded and these younger men afforded the opportunity to take their legitimate place in the anti-tuberculosis campaign, thus giving them the chance to prove their worth, and to gradually lift the suspicion of inefficiency from the profession as a whole.

For the older practitioners and those less favored by education and experience, some concerted plan should be devised to supply their deficiencies. No better way appears to offer than that already instituted in some localities, by which physicians in charge of public sanatoria take pains to keep in touch with the local physicians in the communities from which their cases come. This may be done by periodical reports and helpful criticisms upon cases sent to the sanatoria, or by frequent addresses to local medical societies, or, most valuable of all, by holding frequent clinics upon tuberculosis in the various communities at which clinics the various phases of the diagnosis and treatment of tuberculosis may be emphasized.

In addition to this there are certain tendencies in general practice which appear to need correction in order that the best results may be obtained.

The common failing by which interest is concentrated upon cases of acute or severe illness to the neglect of minor or less urgent ailments surely leads to many cases of undetected tuberculosis. A failure to recognize the ubiquity of tuberculosis, combined with a too intimate and personal point of view, often diverts the family physician from the attitude of eternal suspicion, which is the only safe position in regard to tuberculosis and which is often the secret of the success of the specialist. Early diagnosis by family practitioners demands a faculty of personal detachment which is not always easy.

The time is surely coming, as we already see it in some industrial establishments, when periodical examinations of all individuals, whether suspected of disease or not, will be made, and if this could only be the rule in general practice, especially when it is known that the individual has been intimately exposed to tuberculosis, it would be a great factor in the early recognition of many cases which are now overlooked.

Then, too, overwork, the common lot of the general practitioner, leads in many instances to careless methods, especially in the matter of physical examination.

The pressure of modern life and the struggle for existence are felt nowhere more keenly than in the practice of medicine. Income depends upon the number of patients, and here as elsewhere unregulated quantity usually detracts from the quality of the service rendered.

Speeding and overpressure are national faults and the remedy is not apparent, but it would seem as though the beginning of the struggle against these influences should be found among professional men.

In Hospital and Dispensary Practice

The general principles here are, of course, the same as in private practice, and the same needs and responsibilities are evident, only perhaps intensified.

Special tuberculosis clinics have done as much as any other one agency toward raising the standard of medical work in tuberculosis, and they constitute the pivot of the campaign in every large community.

It is in hospitals and dispensaries that medical and social forces join hands in closest harmony, and here as in many other directions tuberculosis has led the way.

Hospital social service represents the realization of this contact and is already lending its broadening influence to all phases of institutional activity.

The physician should be the center and guide in this work, and, in consequence, must develop that quickening social sense which looks behind the mask of evident disease to discover the multitude of social ills, of which disease is so often merely one expression.

Too frequently physicians have failed to realize this responsibility, and already we hear mutterings of discontent from social workers complaining that physicians are not interested or qualified to guide their work and, consequently, they are calling for freedom from medical restraint.

As a matter of fact, it would seem as though physicians must plan the campaign in all social work where disease is the central point of attack, but in order to do this they must understand and correlate the various points of view which are brought to bear by the social workers who for this purpose may be considered their great aides.

Hospital social service, to be sure, *may* be rendered without the physician, but it will fail of its highest efficiency and may even miss the mark entirely.

Just a word of the relations of sanatorium physicians in this connection. They occupy a special field and have special opportunities, not only in their immediate duties, but particularly for the training and education of their patients who are to go back as missionaries of health to the communities from which they come.

In large measure these physicians are responding splendidly to their opportunities. Could they not, however, keep in closer contact with the local conditions in these communities, learn to realize better the complexities of the environment so different from the simple sanatorium regime? In so doing, perhaps, they could spare advice which is im-

possible of accomplishment, and possibly use greater individualization in the consideration of their patients by attempting to harmonize abstract ideals with the stern realizations of actual life.

For, after all, the problems of after-care should be as important to the sanatorium physician as they are compelling to the family doctor at home.

Here, too, should be again emphasized the possibility of mutual helpfulness already discussed by the plan for local clinics to be held by sanatorium physicians. They would in this way no doubt gain quite as much useful knowledge as they would be able to impart. For sometimes one is forced to think that sanatorium physicians are quite as ignorant of the demands of real life at home as the family practitioners are supposed to be of early diagnosis.

In Scientific Research

We are apt, in the stress of social and clinical problems, to overlook our absolute dependence upon scientific medicine for reliable methods of approach.

The discovery of tubercle bacilli by Robert Koch paved the way for the whole modern campaign against tuberculosis, and ever since then careful investigation and experiment have continued to guide us in our efforts to control or cure this disease. While hopes for a specific cure have been thus far disappointing, success with other infectious diseases sustains the belief that some day such a cure will be forthcoming, but it can only come through laboratory research.

It is peculiarly important that the public realize this dependence upon scientific investigation in our popular movements against preventable disease. Intelligent knowledge in this respect will be the best safeguard against unreasonable efforts to hamper animal experimentation—efforts which are founded upon false premises and sustained by an appeal to be a one-sided and unreasoning sentimentality.

Another important advantage gained by close touch with the laboratory is a better appreciation on the part of both physicians and laity of the inherent falsity of the claims for the numerous so-called cures which are so often successfully exploited. These frauds constitute one of the saddest commentaries upon our modern civilization, and possibly one reason why our anti-tuberculosis campaign thus far seems to have made so little headway against them may be found in our failure to systematically inculcate sound ideas concerning the fundamental necessity for a scientific basis for our theories as well as for our practice.

In Public Health Service

This phase of the physician's responsibilities has already been admirably discussed in the preceding address and need not be further considered.

It may be desirable, however, simply to emphasize that in the future development of the tendencies in modern medicine which we have considered, the physician trained in sanitary science and in public hygiene must be the acknowledged leader.

For such men the future will undoubtedly find great need in the public health service. At present the facilities for training physicians for this service are woefully inadequate and the incentives to accept such positions lamentably small.

A far-seeing policy on the part of institutions for medical instruction will supply the former defect, but much more generous inducements must be offered by State or Municipality in order to attract the type of men needed for this responsible work.

In Connection with Civic and Philanthropic Organizations

These organizations constitute the backbone of the campaign for social betterment all over the world. Foremost, perhaps, among such activities are the various movements aimed at the eradication of preventable disease and here, of course, tuberculosis has held a chief place.

The very best elements of our civilization are here represented, and the success thus far attained bears witness to their ability, resources, and enthusiasm.

The relationship of physicians to these organizations has varied somewhat in different communities. In some, physicians have furnished the original inspiration and have continued to dominate the whole situation. In others, the laity have outrun their medical associates, becoming impatient of their conservatism or lack of enthusiasm. Still others have been able to successfully combine the lay and medical interests upon a harmonious and effective working basis, and this represents the ideal plan of organization.

In such company the physician, to be truly valuable, must have learned much of the modern standards of social and charitable work in order to co-ordinate the strictly medical problems and to properly appreciate the point of view of the social experts with whom he is associated.

No experience is more productive of future helpfulness to the physician than that which may be gained by membership in local agencies for the relief of the poor and the study of their social and economic environment. Opportunities for such experience are not lacking in any community, but unfortunately few physicians avail themselves of them.

While they need not expect to become expert sociologists the acquirement of the "social sense" is so valuable an asset to physicians in their work that they can ill afford to neglect such opportunities. Special medical knowledge becomes in this way doubly valuable, because it can be adapted to actual social conditions of which, in the past, medical men have been remarkably ignorant

and neglectful. Upon the other hand, in this way the position of a physician as an expert adviser in medico-social problems becomes greatly strengthened and secured.

As Citizens

Physicians are notoriously poor citizens. The nature of their professional work, which is necessarily engrossing, may be advanced as a sufficient reason for this. It is evident, however, that with a proper realization of the responsibilities of the newer practice of medicine to which we have referred, such an explanation must be recognized as failing to offer a reasonable excuse.

Students, scientists, and clinicians we must continue to be, but the call of the future is for a wider application of our special knowledge expressed in public efforts on behalf of the common good.

In the past, our profession had commanded the devotion, enthusiasm, and self-sacrifice of its members, but its viewpoint has been more or less self-centered.

The achievements of preventive medicine have revolutionized our practice, to be sure, but, better still, it has thrown open the gate of opportunity and responsibility for active participation in all of the social and economic problems which are pressing for solution all over the world. Our medical horizon has thus become immeasurably widened.

The dimmest appreciation of the changed relationship, such as we have endeavored to trace between the physician and their private or hospital practice, their scientific investigation or their public and civic activities, cannot fail but indicate the splendid opportunities for efficient citizenship which to-day lies open before the medical profession.

We physicians love our country as much as other men. We are proud of our democratic institutions. We share in the growth and development of this wonderful land of ours. But we have been very busy with our own most interesting and engrossing business.

The memorable traditions of our profession guarantee, however, that it will not fail to grasp these developing opportunities to serve the Commonwealth. In the solution of the inevitable problems of transition which are involved we may look for the campaign against tuberculosis to take the lead in the future as it has in the past.

And thus may we hope to fulfill our full responsibilities both as physicians and as citizens.

A WEEK ON A HEALTH EXHIBIT CAR

BY EUGENE KERNER,

FORMER EXECUTIVE SECRETARY, KENTUCKY ASSOCIATION, FOR THE STUDY AND PREVENTION OF TUBERCULOSIS

The necessary arrangements having been made with the railroad over which our health exhibit car was to go, we left Louisville on one of the regular passenger trains traveling as a private car. The first stop on this trip was in a town of about 5,000 inhabitants. Upon our arrival at the station, we were met by a delegation of doctors from the County Medical Society, the women's clubs of the city, the fraternal orders and two newspaper reporters, all of whom had received notice of the car's coming ten days before, through letters sent them from the office of the association, explaining the purposes of the car and requesting them to make arrangements for its publicity and a large attendance. After the car had been placed in a convenient position on a railroad siding by a freight engine, it was thrown open to the public.

The two men in charge took the group of delegates through, explaining to them the various charts, pictures and exhibits, making plain to them that the purpose of the exhibit was to reach the common people rather than any attempt at a scientific exhibition for the doctors. The delegates then informed us that they had arranged to have two doctors in attendance during all hours to assist the demonstrators, and the women's clubs assigned two women to act as a reception committee, changing them every two hours. It was about 11 o'clock when the car arrived, and by 12 o'clock exactly 160 visitors had been registered. From 12 to 1 the car was closed to give all a chance to have lunch, and at 1 o'clock there was a large crowd waiting to get in. They had to be handled in groups of from 10 to 15. All during the afternoon, two doctors and the two demonstrators, each having charge of a group, explained the exhibits in detail and answered numerous questions. The women distributed literature and invited all visitors to attend the illustrated lecture which had been arranged for that night in the Court House. At 5 o'clock, when it became too dark to see, the doors were closed, and the register showed that 609 persons had seen the exhibit in six hours.

The demonstrators, who are also the lecturers, then went to the Court House with the stereopticon outfit and made the necessary electrical connections and erected the screen. The lecture was announced for 7.30 P. M. and at 7 o'clock the Court House was crowded to the doors, and many were turned away. During the lecture the closest attention was given to the speaker, and at the close all were urged

to tell about the car and to send their friends and relatives to see it the next day. In the morning, arrangements were made to have the pupils of the public schools come in groups of 25 at a time, and during the day all the pupils of the public white school and those of the colored school were taken through, and the exhibits were explained to them in a way that they could understand. Even to the kindergarten children the exhibit was explained in "story" form. On the second night an illustrated lecture was given in one of the colored churches, and again to a "packed house." During the day and a half we were in this town 1,766 persons were registered, not counting children under 14 years of age.

The car left the following morning for the next stop on the schedule, a small country village of about 200 inhabitants. As we had not had the names of any organization in this town there had been no announcement of the car's coming. A visit was immediately made to the school house, explaining to the teacher the purpose of the exhibit, and plans were at once made to have the children go through the car. Later, permission was secured to use one of the local churches for an illustrated lecture. When the children came to the car they were told that the lecture would be given at the church that night, and they all were urged to bring their parents, and also to tell their parents about the exhibit. For the first few hours visitors were very few, but at the time the car closed at 5 P. M., 198 visitors were registered, many of them visitors from the surrounding country, and most of them had promised to come to the lecture at the church. News of the lecture spread through the surrounding country by the school children brought out a large attendance, who sat quiet for one hour and twenty minutes.

The next stop was a town of about 500 inhabitants, where we were again met by a committee from the two fraternal orders, who had lodges in this town. They offered their services to do anything they could to help us in arousing the public, and their efforts were not in vain. That night one of the lodges turned over one of their lodge-rooms for the lecture, there being no other hall available. Here again we had a crowded house. Upon invitation a number of those present asked questions concerning tuberculosis and other health problems, which brought on a helpful and interesting discussion.

On Saturday afternoon of that week, in the midst of a heavy snow storm, the car arrived in a town of 15,000. There was nobody to meet us, and there was no convenient siding on which the car could be placed so that it would leave it accessible for the people, and to our surprise we found that nothing had been done in the way of arranging for lectures or other publicity work. Our letters in this particular case had fallen in the hands of the wrong persons. After seeing that it was not practical to exhibit in this town, the co-operation of the progressive ministers was secured, and arrangements were made to have a union service of the churches on Sunday evening. This proved a great success and over a thousand of the best citizens in town filled one of the largest churches in the city, and the next morning many of them walked a great distance to see the Exhibit car.

From here the car went into the heart of the Kentucky mountains. Advance work by mail in this district was practically impossible, and the success of our visits depended entirely upon the work that could be done after arrival, and as we were scheduled for one day only in each place this action had to be taken quickly. The county newspapers, however, had given our schedule generous publicity, and in many of the cases we found people who had arrived from rural districts away from the railroad in carriages, on horse-back and mule-back, all of them anxious to learn something about the terrible disease, tuberculosis. In these small mountain towns we often found it necessary to go several miles from the car to find a church or schoolhouse in which to give an illustrated lecture, but in each case an audience was always at hand, the announcement having been made through the school children. The news that there would be a "picture lecture" (confused in their minds with moving picture show) was always enough to bring them out.

The real value of the traveling car seems to be its advertising qualities, and the chance that it gives individuals to ask questions concerning their personal problems while they are studying the exhibit with the demonstrator. An abundance of literature was always distributed, and upon everyone was impressed the importance of reading it. It has been the writer's experience that before using the car it was considered a good attendance to have 100 or 150 persons present at a lecture, but with the car we talked almost invariably to a "packed" house.

The question of expense was often asked and it was explained that the railroads of Kentucky haul the car free of charge. There was no expense excepting the hotel bills and salaries of the two men in charge, nothing ever being paid for the places in which the lectures are given.

At the office of the Association there is a card catalogue of every town in the state, giving the names of prominent citizens, the churches, fraternal orders, medical societies, women's clubs, newspapers, and all other organized bodies, who might be of assistance. When a trip is planned, a complete schedule for the entire trip is made out and submitted to the railroad over which it is to extend, and after receiving their "O. K.," it is sent out to all the newspapers in the counties through which the car is to travel. Then the personal letters above mentioned are sent to the various organizations and individuals who might be interested. During the four months that the car has been on the road over 49,000 persons have passed through it and have heard the lectures.

A TUBERCULOSIS QUESTION BOX

Suitable questions will be answered on this page each month. No treatment will be prescribed nor medical advice given for specific cases. Such advice can be given intelligently only by the patient's own physician. Address all communications to "Question Box Editor," JOURNAL OF THE OUTDOOR LIFE, 289 Fourth Avenue, New York City. Please write only on one side of paper. Questions received before the 10th of the month will be answered the following month.

TO THE EDITOR.—1. What good does tuberculin do? 2. What cases are not advisable to take tuberculin? B. B. L.

Tuberculin must be given carefully by a physician who is accustomed to its administration as it is a poison and given injudiciously can do much harm. Properly administered in suitable cases, it appears to increase considerably the resisting power of the body against the disease.

The conditions under which it may be administered are so various and technical, that it is impossible to outline them in such a letter as this. In general, however, it may be stated that it should never be given in active or acute causes with fever, but to cases in which the general condition is fairly good where it acts as an adjunct to the usual methods of treatment. (See JOURNAL for January and March, 1912.)

TO THE EDITOR.—Will you kindly answer the following questions: 1. When one is afflicted with pulmonary tuberculosis together with some disease of the joints does this affection of the joints interfere with or retard the improvement of the lungs and if so would a recovery from the lung trouble be probable while joint trouble persisted?

2. What is miliary tuberculosis and is it incurable or less likely to cure than other forms of tuberculosis?

3. Does the sound of rale (or rales) in the upper quarter of both lungs denote a case beyond incipiency providing other indications of affection are lacking?

4. When one is the victim of tuberculosis of the joints, can lungs become infected from this source, and if so, does it generally occur?

F. S. H., Saranac Lake.

1. It is a noteworthy fact that often cases of joint tuberculosis are immune to pulmonary tuberculosis. Where the latter occurs in joint cases, it is usually of a mild character. It would appear as though the localized tuberculosis in the joint afforded some sort of protection to the lungs. It has been suggested that this is a form of natural vaccination. It therefore follows that there is no reason why recovery from the lung conditions should not go on independently of the joint trouble. Of course, the general condition of the patient would be an important factor.

2. Miliary tuberculosis may be general or pulmonary in character. When general throughout the body, it is an acute and very fatal disease. In the lungs there is a form of chronic miliary tuberculosis in which the disease is scattered in very small areas rather than concentrated in one or two more extensive areas. The curability of such cases depends upon the amount and distribution of the disease and especially upon the degree of constitutional disturbance. In general, the more localized forms heal more readily.

3. According to the classification of the National Association, such a case would be moderately advanced.

4. This has been answered under number 1.

TO THE EDITOR.—1. What do you think of the "—— pneumonia cure" as a remedy for tuberculosis?

2. Do you advise a "sun bath" on the bare body? Will it raise the temperature, or accelerate the heart action?

3. What constitutes a dangerous draft of air?

4. My room has two windows on one side, one in an adjoining side, and a door in the side adjacent to the latter. With the door and all the windows open, am I in a draft, if I sleep with my bed across the corner of the room between two windows?

W. J. R., No. Carolina.

1. We should not advise the use of the remedy you name.

2. The sun bath is of doubtful efficacy and is rarely employed. If overdone, such treatment would certainly do harm and might increase fever. Such results, however, could be avoided by proper care.

3. The fear of drafts has been much exaggerated. There is no danger from free circulation of air, provided one portion of the body exposed to the draft does not become unduly chilled. Patients with pulmonary tuberculosis should never sit or lie directly in the wind or where they face a strong draft of air. When one is in bed it is comparatively easy to protect oneself and it would appear as though the arrangement of your room was not objectionable.

TO THE EDITOR.—I have been taking the cure two and one-half years, the first year being spent at a sanatorium. I improved greatly while away and could easily walk two miles. Now if I walk two or three suburban blocks I have a weakness in my breast. This seems strange as I have gained thirty-two

pounds which makes me weigh one hundred and sixty.

1. What do you think causes this weakness?

2. I take six or seven raw eggs and three pints of milk daily. I thought I could stop taking so much nourishment as I was getting so stout, but my physician says I must never let up. Can one get too stout with the trouble?

3. If one's voice is affected is one climate as good as another or do you think the mountain air is better?

4. Is there any treatment for the voice at any of the sanatoria except the use of the spray?

5. Is it possible for one's voice to become natural after being husky for a long time?

6. Is the lower part of the lung more difficult to heal than the upper part?

A Subscriber.

1. This is a medical question which we cannot answer.

2. There is a good deal of difference of opinion among physicians about the subject of diet. The general tendency at present would be to cut down the extra diet in such a case as you describe. We would refer you for further information on diet to the October, 1911 number of the JOURNAL OF THE OUTDOOR LIFE.

3, 4 and 5. All of these questions about the voice depend entirely upon what is the cause of the symptom. Only a physician examining such a case could properly answer these questions.

In regard to treatment for the larynx when diseased, in the majority of sanatoria no radical form of treatment is employed for the reason that it is generally believed that such cases do better when left alone and the voice and larynx rested as much as possible.

6. In general, yes, but the cases vary so much that a general rule would not necessarily apply to any individual case.

TO THE EDITOR.—1. Is it considered inadvisable for persons with tuberculosis to sleep with the arms above the head, or to reach after high objects, and the like?

2. What is your explanation of the pains in the chest sometimes felt by tuberculous patients?

3. Will you be kind enough to advise me as to the best means of arranging a second-story sleeping porch, with a view to keeping out two-legged and four-legged intruders, and also screening the sleeper from the sight of nearby neighbors.

M., Maryland.

1. In general, yes.

2. Pains in the chest may be due to many causes. Pleurisy is probably the most common one. Oftentimes however, aching and fleeting pains of the muscles of the nerves of the chest occur which cannot easily be explained. They are probably often due to what is called a reflex pain caused by the irritation of the nerves of the lung, by the disease, but referred by the patient to the chest wall itself. Such pains are in no way serious.

3. Screen the porch carefully with wire netting or screen. On the inside hang some Japanese matting, arranged so that it may be lowered or raised easily. For further detailed information get the new book on "Fresh Air in the Home and how to Use it," published by the National Association for the Study and Prevention of Tuberculosis, price $1 postpaid.

TO THE EDITOR.—Can you tell through the columns of your valuable and interesting magazine the significance of the red cross (tuberculosis) and which is *correct* that where the arms are of equal length or where the upper arm is shorter than the lower.

I have been told that the cross where the arms are of equal length is the cross of Lorraine and that of unequal the Patriarchial cross. I should like to know which the tuberculosis cross is and why this emblem was chosen, also the color red was selected.

An Inquirer.

The double red cross was first suggested as the symbol of the International Anti-Tuberculosis Association in Berlin in October, 1902. The proposer of the symbol was Dr. G. Sersiron of Paris who is now Associate Secretary of L'Association Centrale Française Contre la Tuberculose. Dr. Sersiron's proposal was adopted at the Berlin meeting and a movement was at once started to secure official recognition and protection for the double cross from European governments.

The double red cross is similar in shape to a cross used frequently in the Greek Catholic Churches, and also to the Lorraine Cross of France. The National Association for the Study and Prevention of Tuberculosis in the United States adopted in 1906 the proportions of nine for the length of the cross to five for the width of the arms, with a space one-ninth of the length between the arms. Owing, however, to the wide divergence in the use of the emblem, at the recent meeting of the Association held in Washington, a special commission was authorized to study the form, color, shape and dimensions of the cross with a view to standardizing its usage.

TO THE EDITOR.—Rectal injections of olive oil have been recommended as an aid in the treatment of tuberculosis. Please give your opinion as to the benefit derived from such use of this oil.

D. H. K., Port Townsend, Wash.

Rectal injections of olive oil have a certain amount of value because it is an additional way of getting nourishment. If such nour-

ishment in the form of oil is desired, it can usually be taken by the mouth however. An additional advantage to the rectal injection is that it has a very beneficial effect if the bowels are inclined to be constipated. As a direct treatment for tuberculosis such injections have no value and its use will depend upon the conditions above indicated.

To THE EDITOR.—Would you consider it injurious for one with pulmonary tuberculosis to whistle?

B. N., New York.

No.

To THE EDITOR.—1. Please give me your opinion on the wearing of a light flannel in summer here in the South for one who sleeps almost outdoors. So many physicians differ in opinion.

2. How to avoid summer colds, especially in the head. Every year I am troubled with it. Never in winter, although I sleep in the same place, that is in the open air.

3. Do you really think it best to go to a sanatorium when you are a semi-invalid for several years? Would it make any difference? Maybe I would rest more than at home.

H. H. L., Louisiana.

1. As you correctly state, there is a considerable difference of opinion regarding the use of flannel underwear in summer. We think, however, that the majority of physicians consider it unnecessary in summer especially in a warm climate, and it is sometimes distinctly undesirable.

2. Colds are usually contracted either from avoidable exposure to wet or by rapid variations in the temperature of the body. In the summer this usually occurs from imprudence in not having sufficient protection after perspiration, or not recognizing marked changes in temperature which call for an increase of clothing. Cold chest sponges are helpful in summer as in winter and care in keeping the nose and throat clear from dust by means of mild antiseptic washes, is also helpful.

3. The problem of deciding between sanatorium and home care is often difficult. It depends upon the factors in each individual case and no one could decide the question without knowing the case thoroughly. As a general rule, a case which has run along for several years derives less benefit from a sanatorium than one which is in the early stages. In any case, however, it is very important to adhere to a strict regime of life and it is very desirable to learn this regime by residence in a sanatorium for a longer or shorter period of time.

HEALTH MAXIMS STOLEN AND REVAMPED*

Spare the cure, kill the child.

Fresh air is the best life insurance agency.

Colds are easily "caught" but hard to lose.

Good health is priceless, yet it is without price.

Alcohol is a preservative, but not of the health.

Coddle yourself and you invite pneumonia.

"Dope" for colds is "dough" for the doctor.

Why be afraid of a little fresh air in winter?

Coddling; preparing for consumption and pneumonia.

The best defense against disease is the simple life.

Cheap candy—expensive funeral. Why take chances?

Colds are not caught from fresh air, but from stuffy air.

To neglect sore throat is to give the undertaker a job.

Pure air makes pure blood; pure blood makes you disease-resisting.

Sixteen to one. An ounce of prevention is equal to a pound of cure.

Health is not put up in bottles, and can not be bought at the drug store.

Don't wait till to-morrow if the child has sore throat. Call the doctor at once.

The more sunlight and fresh air in your house, the less the need of a doctor.

What some thrifty(?) people keep from the doctor they give—to the undertaker.

Tea, coffee, and alcohol are stimulants—not foods. They lift one up to drop him hard.

Don't hibernate; ventilate. Plenty of fresh air will make the fires of life burn brightly.

Do not forget that the pores of the skin need to be open in winter as well as summer. Bathe often.

The chest-protector man should throw no stones at the woman with peek-a-boo waist and lace hose.

Robbing one's self of sleep is putting a mortgage on future health and happiness. Nature will surely foreclose.

Chew your food; your stomach has no teeth. The hen swallows her food without chewing, but she also swallows grinders.

Don't begrudge the doctor his fee. See him when needed and pay him cheerfully. The undertaker charges higher than the doctor.

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*Reprinted from Life and Health (Washington) March, 1912.

NOTES AND NEWS

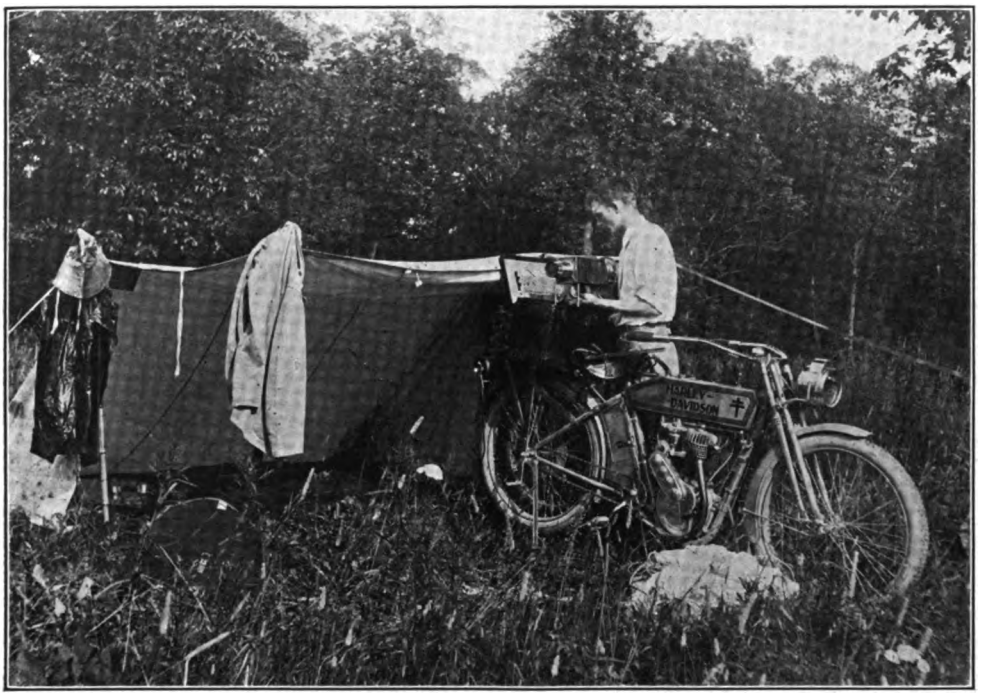
How to Get Fresh Air

"Fresh Air and How to Use It" is the the title of a new book by Dr. Thomas Spees Carrington, Assistant Secretary of the National Association for the Study and Prevention of Tuberculosis, and published by the Association. The book is a further development and a considerable expansion of Dr. Carrington's pamphlet "Directions for Living and Sleeping in the Open Air."

Although fresh air is the most fundamental of all the necessaries of life, few people know how to use this free gift to the best interests of their own health and that of those with whom they live and work. Dr. Carrington aims in this book to show how an abundance of fresh air is within the reach of everyone, whether he be a millionaire owner of a country house, or a dweller in a city tenement. Probably no more complete compendium of information on how to get fresh air in the home at all times has ever been published.

The aim of the book is not primarily to suggest methods of treating disease in the open air, though it is published by the National Association for the Study and Prevention of Tuberculosis. It is rather a handbook for everyone who wishes to ward off disease in his own body and in those of the other members of his family.

Dr. Carrington's method of treating the subject is practical. He aims to be so concise that anyone may be able to follow out his instructions in securing or making the devices of which he speaks. Some of the topics which he discusses are, window tents, homemade and manufactured; roof bungalows, with suggestions for building; temporary fresh air porches for country use; wall houses and iron frame porches for city use; tents and tent houses; open air bungalows and cottages; roof playgrounds for children; and clothing, bedding and furniture necessary for outdoor living and sleeping.



TUBERCULOSIS CAMPAIGNING ON A MOTORCYCLE IN WISCONSIN

The book contains 150 illustrations, including floor plans and working drawings. It is published as cheaply as possibly by the National Association for the Study and Prevention of Tuberculosis as part of its campaign for the prevention of disease.

The regular price of the book is $1 postpaid, but it may be secured in combination with a year's subscription to the JOURNAL OF THE OUTDOOR LIFE (either new or renewal), for $1.35.

New Red Cross Seal Commissions

In Georgia, Alabama, Mississippi and Louisiana, the sale of Red Cross Seals this year will be pushed with greater vigor than ever before and state-wide campaigns will be carried on in each state. E. G. Routzahn, representing the National Association for the Study and Prevention of Tuberculosis has effected working organizations in each of these states.

In Georgia, the sale will be directed by a temporary state commission of which Mr. Kendall Weisiger of Atlanta is chairman. Headquarters will be in Atlanta, and it is planned to reorganize the state association with funds derived from the sale. In Alabama a similar commission has been found with representatives from the leading centers, and with Dr. George Eaves, Executive Secretary of the Birmingham Association as secretary. Here also it is planned to organize a state association, if sufficient funds are realized. In Mississippi Dr. W. J. Leathers of the State Board of Health will direct the work of the Red Cross Seal Commission. With money raised last year and what will be raised this year, it is hoped that an effective state organization may be formed. In Louisiana, the State Anti-Tuberculosis League will conduct the sale under the leadership of Miss Kate Gordon of New Orleans.

This will be the first real attempt at a state-wide sale in any of these states, except Mississippi.

Lecturing from a Motorcycle

Up-to-date methods in carrying the crusade against tuberculosis into rural districts have been adopted by the Wisconsin Anti-Tuberculosis Association this summer. Instead of the ordinary methods of travel, the association makes use of a motorcycle.

Mounted on this machine, Mr. Theodore Werle, field-worker of the association, is making a tour of the state, visiting villages and cross-roads, wherever he may find an inviting spot for a talk. Later in the year he may visit the rural schools. Besides a stereoptican with slides, an exhibit of seventeen charts, and literature for distribution, Mr. Werle carries a complete equipment for sleeping out of doors and for doing his own cooking. Because he is not tied down by train schedules and can travel rapidly, he can reach enough people in a day to make country work practical. In an attempt to take the gospel of good health to the country, where there is a great deal of tuberculosis, a lecturer and an exhibit were sent out last year by the Wisconsin Association with a team and wagon, but the cost of keeping a team and the loss of time in getting from place to place made the work almost prohibitive. It costs less on the motorcycle, however, than traveling by rail, and besides it is possible to reach the most remote sections.

Homeless Consumptives in New York

No less than 5,053 homeless consumptives are drifting about New York City, according to statistics just compiled at the instance of the Tuberculosis Committee of the Charity Organization Society. The committee is making a campaign to show the need of a reception hospital for the treatment of such patients.

There were a total of 29,460 living cases on the current register of March 23rd, of which 5,053 were homeless. Of these 1,064 were actually without any place to call their own, 2,099 were "not found," 1,346 lived in lodging houses, and 544 in furnished rooms.

Of 2,553 deaths from tuberculosis since January 1st, 384 were of persons actually homeless, 1,163 of persons "not found," 505 in lodging houses, and 384 in furnished rooms. Those who had been in a hospital once numbered 2,254, or 84 per cent; 300 or 11 per cent, had been in the hospital twice; and 99 persons, or 5 per cent, had been in a hospital three times or more.

Health Boards and Discharged Cases

In an investigation by the Massachusetts State Board of Health to determine to what extent local Boards of Health follow up discharged sanatorium cases, some startling conditions have been discovered. The investigation covered the Worcester district and was for persons discharged between July 19, 1910 and March 14, 1912.

During this period there were reported to the Board of Health of Worcester or to the state inspector of that district, or to both, 80 cases as discharged from state sanatoria or hospitals. Of the eighty persons thus reported, there were said to have been "apparently cured," five; "arrested," twenty-eight, and "improved," sixteen. Forty-nine cases, therefore, or sixty-one per cent of the total, were discharged as either "apparently cured," "arrested," or "improved." A brief statement concerning these forty-nine cases is as follows:

Dead	5
Disappeared	9
Active tubercular process	19
No history	3
In apparent good health	5
Not investigated	3
Stayed at hospital to work	5

Of the 80 cases, it was found, on inquiry at the office of the local board of health, that 16 had apparently never been reported. No knowledge whatever could be obtained as to the whereabouts of 20 of the 80 persons supposed to have returned to Worcester (25 per cent of all cases). Of these 20 persons, 9 had been discharged from state sanatoria as "apparently cured," "arrested" or "improved." 4 had been discharged as "unimproved," and 7 with no comment as to health.

Commenting on the situation the monthly bulletin of the State Board of Health says:

"Criticism is not aimed specifically at any one board's or official's work. Similar investigations in other sections of the Commonwealth have shown like results. Such investigations obviously deserve the attention of the public, and demand renewed efforts of co-operation on the part of public health officials and private tuberculosis organizations."

Ventilation of School Rooms

The recent report of a special committee of the New York City Board of Education on ventilation of school rooms contains many important recommendations of interest to anti-tuberculosis workers, among them the following:

That the temperature of class rooms in school buildings shall range between 60 and 68 degrees Fahrenheit, and of halls and passageways between 60 and 65 degrees Fahrenheit, unless the outdoor temperature be higher.

That a large size tested thermometer, showing temperatures between about 50 and 100 degrees Fahrenheit, be hung from the ceiling in front of the teacher's desk in each classroom.

That the thermostats be set at 65 degrees Fahrenheit.

That the windows in all rooms be opened for three minutes after each class period, the children meanwhile doing physical exercise, and between 12 o'clock noon and 1 o'clock, as part of the school routine.

That wherever there are transoms over windows or doors or other openings into the halls from classrooms they be kept open, at least in part, the whole time.

That in new buildings, windows be made in small sections, with pivots and adjusters.

That in schools which are provided with artificial systems of ventilation the systems be operated only when inclement weather forbids adequate window opening.

That a concisely worded card of instructions be mounted in each classroom.

That the principals of evening schools be permitted to order the operation of the ventilating systems.

That the amount of heating surface in the halls and classrooms be reduced.

That three visiting engineers, to assist in the operation of heating and ventilating plants, be appointed.

That every possible encouragement and facility be given by the Board of Education for the establishment of open-air classes.

That every practicable facility be offered any responsible committee which wishes to take observations in the schools as to ventilating and heating conditions.

Stock Taking in Philadelphia

With a total tuberculosis equipment of less than 600 beds, and with 2,960 deaths from this one disease last year, the Pennsylvania Society for the Prevention of Tuberculosis, characterizes Philadelphia's provision for consumptives as very inadequate. A report of a survey of the city's consumption-fighting facilities has just been issued by the society.

After a description of the city's present provision for tuberculosis patients, the report makes certain recommendations, one of the most significant of which is that an ordinance be passed providing for compulsory segregation and detention of dangerous consumptives. Other recommendations include the erection of a modern hospital for advanced cases; the discontinuance of sanatorium treatment by the city; the establishment of additional tuberculosis clinics and an association of such clinics; provision for an open air school room in each public school; the increase of the number of school nurses to 55 and the provision of 47 additional municipal tuberculosis nurses; the enforcement of the anti-spitting and registration laws; and provision for a systematic course in practical hygiene to be given as a part of the regular school curriculum.

Tuberculosis Fatal to Carpenters

According to Frank Duffy of Indianapolis, General Secretary of the United Brotherhood of Carpenters and Joiners, 17 per cent of the death claims paid by the union in the fiscal year 1911-1912 were from tuberculosis. More deaths are caused by tuberculosis than by any other single disease.

The union pays a death benefit on the death of both carpenter and wife, hence the figures of the report which are based on the number of claims paid includes both members of the family. During the year from March 1, 1911 to March 1, 1912 the union paid 385 claims for death from tuberculosis. The number of deaths during that time approximated 2,200. This is more than 17 per cent of all deaths. The previous yearly report showed 15.29 per cent.

Thirty-fifth Edition, Dr. Knopf's Prize Essay.

The new (7th) edition of Dr. S. Adolphus Knopf's International Prize Essay "Tuberculosis as a Disease of the Masses and How to Combat it" has just been translated into French by Dr. Eugene Grenier of the Bruchesi Tuberculosis Institute of Montreal. The proceeds of the sale of this book will be for the benefit of the institute. The first translation of a former edition into French appeared some years ago in Paris. Dr. Grenier's new French-Canadian translation represents the 28th foreign edition, which, with the seven American ones, makes 35 editions of this popular work in 24 different languages which have appeared within the last ten years. These are, the American (7), Arabic, Bohemian, Brazilian, Bulgarian, Canadian, Chinese (2), Dutch, English, Finnish, French, German, Hebrew, Hindu, Hungarian, Icelandic, Italian (2), Japanese, Mexican, Norwegian, Polish, Russian (2), Servian, Spanish, Swedish, and Turkish. Since the book was written mainly

for the education of the laity, this unusually large circulation speaks well for the world wide interest of the masses in tuberculosis, in whose interest the Berlin International Tuberculosis Congress offered and awarded the prize. Dr. Grenier's translation is published by the Imprimerie Bilaudeau, Limitee, 71 des Commissaires, Montreal, and is sold at the same price as the American edition, 25 cents per copy.

The English edition of this book and the JOURNAL OF THE OUTDOOR LIFE for a year may be obtained for 85 cents. Special prices will be quoted on foreign editions in combination with the JOURNAL.

Does Drink Cause Most Tuberculosis?

Dissipation is given as the leading cause of consumption in Cincinnati by the Anti-Tuberculosis League of that city, in a report of a special survey of tuberculosis conditions recently made. Damp living and sleeping rooms is given as the second greatest cause, and bad living conditions as the third. "The facts would go further to indicate," says S. P. Withrow in the report, "that if drink and dissipation were eliminated in Districts 3 and 4, (The worst sections: Editor) the bad living conditions as a factor would be greatly minimized. Furthermore, do not the facts strongly indicate that a susceptible physical condition brought about by debilitating influences such as other diseases, dissipation or anything that lowers the resistance, cut more of a figure in the development of tuberculosis than we have been led to believe. Is it not more a question of susceptibility than of chance infection?"

New Life in Little Rock

Under the leadership of the recently organized Associated Charities of Little Rock (Ark.), anti-tuberculosis work in that city is being taken up with new vigor. The tuberculosis committee of the Associated Charities will sell Red Cross Seals in the city and county, and may direct the state sale. Radical recommendations for improvement of housing and school conditions have already been made.

Potters Join Fight

To prevent the further spread of tuberculosis among pottery employees, the delegates in attendance at the recent annual convention of the National Association of Operative Potters, at Atlantic City, unanimously adopted a resolution appropriating $15,000 to wage a campaign against this disease. This resolution also provided for the appointment of two shop inspectors, one with headquarters at East Liverpool, Ohio, and the other at Trenton, N. J., whose duty it will be to inspect the sanitary arrangements of shops and to make necessary recommendations. The Pottery

Manufacturers Association has also appropriated $5,000 for this work.

Twenty-first County Hospital in New York

With the recent decision of the Niagara County (New York) Board of Supervisors to erect a county hospital, the list of such institutions already in operation or provided for has been increased to twenty-one. In nine counties hospitals are in operation, while in ten others the institution is under construction or a suitable site is being sought. The Orange County (New York) Board of Supervisors has taken over the Newburgh Tuberculosis Sanatorium, promoted and established in 1910 largelv through the initiative and generosity of former Governor B. B. Odell, Jr., of Newburgh. The offer to give to the county this institution representing an outlay of about $25,000 was made by Mr. Odell and his associates without reservation. It is expected that substantial alterations and extensions will be made and additional land acquired so as to meet the greater needs of the county.

Five New Hospitals in Wisconsin

According to records of the Wisconsin State Board of Control, county tuberculosis hospitals are in process of erection in Douglas, Racine, Outagamie, Fond du Lac and Manitowoc counties and a committee has been appointed to investigate the proposition in Dane County. Each will care for about twenty-five patients.

Local Hospitals in Texas

That Texas is forging rapidly forward in the vigorous campaign being carried on by the State Anti-Tuberculosis Association is evidenced by the recent establishment of the first public local hospitals for consumptives in the state. In El Paso, provision has been made for a consumptives' ward or annex in the new County Hospital. Fort Worth will make similar provision in its new $100,000 hospital. Dallas has provided for special hospital provision for consumptives under the city and county. Houston has also acted favorably in this project. In Galveston, the state university will provide a seaside hospital for children with non-pulmonary tuberculosis. One of the two state sanatoria has been opened and is running to full capacity. Even the hospitals for the insane are taking up the work of providing for their tuberculous patients.

Kentucky's State Commission

The new State Tuberculosis Commission of Kentucky has organized by electing Gov. McCreary chairman and Dr. Everett Morris, of Sulphur, Ky., as temporary secretary. It has been decided to have one or more of the members of the commission to attend all the education meetings in the state this year and stir up interest in the work of the commission in its campaign against tuberculosis. A salaried executive will be appointed in the near future. The commission was authorized by the last legislature, and was given an annual appropriation of $15,000.

New Health Films

Two new motion picture films dealing with health questions have recently been issued. "On the Trail of the Germs" is the title of a film dealing with the prevention of tuberculosis produced by the Selig Polyscope Co., in co-operation with the Chicago Tuberculosis Institute. The film tells an interesting story of how tuberculosis is spread and treated. Dispensary, sanatorium and visiting nurse scenes are given considerable prominence.

"The War on the Mosquito" is a new film issued by Thomas A. Edison, Inc. It shows how the state and federal officials fight the mosquito and also gives some interesting views of the development and life history of the mosquito.

Either of these films may be rented from a licensed exchange. Special arrangements will be made for the first one.

Sanatorium Patients Under Thirty

Sixty-five per cent of the patients admitted to the Iowa State Sanatorium are under the age of thirty years, according to figures recently compiled by A. E. Kepford, state lecturer on tuberculosis. This percentage is calculated from the records of admission kept at the state institution. Following is a table showing the ages of patients admitted at Oakdale in the last two years.

Age	Male	Female	Total '11-12	Total '09-10
Under 15 years...	7	10	17	40
15 under 20.....	40	33	73	78
20 under 25.....	57	82	139	127
25 under 30.....	37	61	98	87
30 under 35.....	33	43	76	64
35 under 40.....	20	26	46	51
40 under 50.....	20	21	41	45
50 under 60.....	7	4	11	12
60 under 70.....	1	..	1	2
70 and over.....	None			

Hospital Maintenance Not Prohibitive

In an effort to prove that the maintenance of county hospitals for tuberculosis is not so expensive as to be prohibitive, the New York State Grange is submitting to boards of supervisors the following interesting figures showing the cost of maintenance in several hospitals already in operation for some time.

County	Average Cost Per Day
Rensselaer.	$1 00
Ulster.	1 40
Ontario.	1 41
Dutchess (County and City).....	1 00
Monroe.	1 33
Schenectady.	1 30

In Ulster County between 10 and 15 per cent of the patients pay for the treatment.

In Ontario County about one-fourth of the patients pay their own way.

At Dutchess-Poughkeepsie Hospital about 5 per cent of the patients pay their own way.

School Lunches in Buffalo

A recent report of the school luncheon committee of Buffalo showed that the amount voted and collected, $2,083.01, has been expended, and that there is on hand $502.78. A total of 60,304 lunches were served to the children in six of the city's schools, and the receipts from these at one cent each amounted to $589.79.

Tuberculin Test Defeated by Popular Vote

The referendum vote on the tuberculin test ordinance recently held in Los Angeles was probably the first popular vote of its kind ever taken in this county. Although the ordinance was vigorously supported by the health authorities, it was opposed by the anti-vivisectionists, anti-vaccinationists, certain veterinary and dairy interests, and others. The result was a defeat for the ordinance by a majority of 5,152 votes. The ordinance was passed last November by the city council, and the vote was the result of activity by local dairymen in referring it to a popular election.

County Nurses in Minnesota

Ten counties in Minnesota now have visiting nurses paid for out of public funds, according to an announcement by the Minnesota Association for the Prevention and Relief of Tuberculosis. All of these counties are acting under a law passed at the last session of the Legislature, which gave county officials authority to spend money for this purpose.

A County Fair on Wheels

As a part of a special agricultural demonstration train, the Tennessee Anti-Tuberculosis League has had an exhibit touring the rural districts of that state. The exhibit occupies a half of one car in the train. It has been under the direction of John D. Strain, executive secretary of the League. The demonstrations and lectures on tuberculosis have provoked unusual attention throughout the state. The train includes exhibits on domestic science, pure food, sanitation, dairying, stock raising, etc. Each exhibit is in charge of a competent demonstrator. The entire train resembles a portable country fair.

Dispensary in Brookline

Brookline, Mass., is the first city in that state to open a tuberculosis dispensary under a law of 1911, which requires that every town of 10,000 population or more have such an institution. The dispensary was opened on July 2nd, and will be under the control of the Board of Health.

Greater Sea Breeze in Sight

The Board of Estimate of the City of New York has at last accepted the offer of the Association for the Improvement of the Condition of the Poor to erect a $250,000 hospital for the treatment of non-pulmonary tuberculosis children, to be located in Seaside Park, at Rockaway Beach. This is the successful outcome of a campaign which has been prosecuted vigorously during the past six years by the association. Sea Breeze Hospital, the first of its kind in America for children with tuberculosis of the bones and glands was opened at Coney Island in June, 1904. In November 1906, the association offered to build a hospital costing $250,000 if the city would provide a seashore site. The wrangle over the Seaside Park in which the hospital will be located has lasted six years.

A Tent for Outdoor Sleeping

B. Goodfellow from Clarksburg, Ontario, has described for the readers of the JOURNAL an interesting tent which he uses, even in the coldest weather for outdoor sleeping. The tent may be ordered in other sizes and almost any dealer can make one. The description follows:

"The tent has a ridge pole 15 feet long, with three upright poles 10 feet high. These four poles may be divided when moving. There are also three 6 feet poles supporting each side of the roof. Half of this roof is used for tent proper which is 7½ feet long by 12 feet wide, this leaves the other half of the roof for a fly which extends out 7½ feet by 12 feet wide.

"We will suppose that a veranda faces the east, as it should to let in the early morning sun if the patient intends to take the treatment in cold weather. The south wall which is 7½ feet long by 6 feet high also the south half of the front and back wall are all made to roll up while the other half ties back. This leaves only the north wall and its corners in place. This means that the openings can be tied when closed and also hooked over by a fly if windy weather prevails. This arrangement allows the patient to live practically in the open air when it is warm, and to close down any part as the wind changes, or all sides if necessary in a storm and still have the tent ventilated by a window in each end near the roof.

"All the poles should be made one foot longer to allow the tent to be placed on a platform if so desired and if the tent is required warmer for winter weather a double platform may be used and a wall 3 or 4 feet hign made by nailing some boards to a post or scantling at the corners. Two extra poles and ropes should be furnished with the tent to support the south wall, if desired for an awning."

Hospital Jottings

An appropriation of $177,500 is being urged for the new Worcester (Mass.) Municipal Tuberculosis Hospital.

Five new cottages have been added to the Tuberculosis Camp of the Montgomery (Ala.) Anti-Tuberculosis League.

A cottage for self-supporting men and women, the gift of Mrs. Russell Sage, and a new laboratory, the gift of Mrs. Clarence H. Hyde, were recently dedicated at the Loomis Sanatorium, Liberty, N. Y.

A movement has been started by the colored residents of Wilson (N. C.), for the establishment of a sanatorium for negroes near that city.

The Providence (R. I.) League for the Suppression of Tuberculosis is planning to erect a new bungalow at Lakeside where it has a summer camp for debilitated children.

A recent report of the Wisconsin State Sanatorium shows that 45 per cent of those entering as incipient cases have been discharged as "apparently cured."

Rapid progress is being made on the building of Connecticut's fourth state sanatorium, being erected near Norwich.

The prospects for the erection of a county hospital in Kane Co. (Ill.) of which Elgin is the county seat, are very encouraging, according to recent reports.

Twelve new shacks have been added to the equipment of the Social Workers' Sanatorium in Milwaukee.

A farm of 371 acres has been offered to the county supervisors of Steuben County (N. Y.) for a site for a tuberculosis hospital by Martin F. Woodbury of Hornell.

A tuberculosis pavilion erected by the Trades Assembly of Rome (N. Y.) has been turned over to the local Anti-Tuberculosis Society.

The King Edward Memorial Hospital for advanced cases of Tuberculosis, at Winnipeg (Man.) was recently opened with impressive ceremonies by the Duke of Connaught, Governor General of Canada.

After over two years of hard work the completion of the Chattanooga (Tenn.) Tuberculosis Sanatorium is in sight.

The county commissioners of Ramsey Co. (Minn.), in which St. Paul is located, have appropriated $50,000 for joint county and city tuberculosis hospital on condition that the city appropriate $25,000.

With the opening of a new building at the Maryland State Sanatorium at Sabillasville, the capacity of the institution has been increased to 425.

A special building costing $20,000 for tuberculosis patients has recently been opened at the State Prison at Wetumpka, Ala.

Seattle will have a municipal hospital for tuberculosis as a result of a recent appropriation of $100,000.

Nearly $20,000 has been raised for the erection of the East Tennessee Sanatorium for Tuberculosis to be located near Knoxville.

The Pennsylvania State Department of Health will soon begin construction on its third state sanatorium to be located at Hamburg near Reading.

Provision for a municipal tuberculosis hospital has been made in Peoria, Ill.

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(See Article p. 830)

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AFTER CARE AND AFTER CURE OF TUBERCULOSIS PATIENTS*

C. D. PARFITT, M. D., GRAVENHURST, ONT.

The subject of the care of the patient who has left the sanatorium is a matter of public interest, since it affects, besides the patient, the family, the physician, the employer, fellow employees, and the municipality. All should fairly realize the limitations of the sanatorium in the usual short period of treatment enjoyed by the patient, and it is important that the need of after care should be appreciated. The type of patient referred to is the proper sanatorium case who has a reasonable chance of making material improvement. The patient, after his training, can fairly well apply the details if he is helped by the sympathetic cooperation of those with whom his life is cast. This paper will deal with the importance of the recognition of this need of after-care, rather than with details of treatment.

The time element plays a most important part in the successful treatment of pulmonary tuberculosis, and but relatively few patients can from their own means afford to live in a sanatorium or health resort long enough to effect a complete arrest or cure of the disease. Neither can municipalities and private charity afford to keep patients at sanatoria a longer time than is sufficient to insure a hygienic training, and to bring them through the active period of illness to a state of relative quiescence of disease, with improvement of general health. When this condition has been obtained at the sanatorium, with a period of watchful after-care, the patient may be considered well on the road to recovery. It is estimated that 75 per cent. of tuberculous patients leave sanatoria or health resorts before the disease is arrested, and that 98 per cent. of all patients have to be treated at home.

This disease demands concessions in the manner of living (usually of a permanent nature), from all persons in whom it has been definitely recognized. The amount of after-care necessary is, in most instances, proportionate, not only to the degree of relative recovery obtained by treatment, but also to the original type and degree of illness. The first two years after the patient has left the sanatorium will greatly determine whether the improvement is to be permanent, but the struggle for victory will seldom be finally won in less than four or five years of consistent watchfulness.

No chronic organic disease improves so readily if given half a chance as tuberculosis, and, because of this tendency to apparent recovery, really unsound methods of living, as well as sound methods of treatment, may frequently bring about considerable real or seeming improvement. The appearance and feeling of robust general health may be quickly acquired, but the local disease in the lung, which has been months or years in undermining the general health, will subside in activity and in degree only after the improved constitutional condition has been long main-

*Read at the twelfth annual meeting of the Canadian Association for the Prevention of Tuberculosis, Toronto, May 21, 1912.

tained. The security of the result will depend upon the amount of repair effected in the diseased area by the improved constitutional condition, or rather by the elaborate defensive agencies of the body, of which inward and physical graces, the improved general condition is the outward and visible sign. This ready response to treatment shown by outward signs of improvement is in itself a pitfall to the individual, as he naturally considers it an index of the slight danger of his disease, and he is tempted, through the feeling of well-being, to require too much of his really slowly-improving lung. If the patient did not so readily enter a fool's paradise of seeming security, but instead felt his illness in proportion to its degree throughout the period of his recovery, relapse would be much less frequent. Indeed the patient about whom his physician often has most misgivings is the one who has but few symptoms and signs of illness, and who, when placed under improved living conditions, recovers rapidly without a setback. Often the satisfactory result obtained by such a patient is less permanent than that obtained by one who is in a far less favorable condition to start with, but who has to make patient endeavor and exercise much self-restraint to win out. The former throws away his chances of permanent recovery, and relapses; the latter maintains his hard-won victory by living a consistently careful life.

The prompt improvement made by a patient after entering a sanatorium, and the unfortunately short term, due to economic conditions, have combined to bring sanatorium treatment, as ordinarily understood, under criticism. Excellent as are the results to be obtained by this method, it is well known that relapses frequently occur. Because sanatorium treatment, thoroughly carried out for a long enough period in suitable cases, can bring about astonishing recoveries in a disease which was thought quite incurable before the sanatorium method was developed, similar results are now expected in all classes of cases. Moreover, permanent results are expected from a term of treatment long enough only in most cases to bring about the appearance and feeling of well-being, without materially affecting the character of the disease in the lung. This incomplete result is doomed to future failure unless a prolonged "after-cure" is carried out. The rigor of this after-cure must depend upon the severity of the case.

The economics of the situation compel us to be content with a fairly practical rather than an ideal result. Different institutions have different aims in their work. One may attempt to obtain actual cure or arrest of the disease, and another the maintenance of working capacity, with more emphasis laid upon improving the patient's resistance than upon healing the disease in the lung. The attempted cure or complete arrest of the disease aimed at by the former may be impossible because funds for the support of the patient run out, and a possible permanent result may be thereby lost. If such a patient, cut short in the middle of treatment, must take up the full burden of life at once, relapse is very probable. In some sanatoria patients can fortunately be kept long enough to enable them to obtain both an improved general condition, and an actual arrest of the lung disease, and they can also be gradually hardened by graduated exercise until a high capacity for work is developed. After-care is still necessary for them, but the "after-cure" has been accomplished before discharge.

The method of treatment by graduated labor, now much to the fore, which has been proven to rest upon a scientific basis, was developed by Paterson* in protest against the incomplete results obtained by a rest cure too rigidly followed after it had accomplished its proper work, and against the relapses in cases only incompletely treated by this conservative method. It still remains to be proven whether the ultimate results obtained by his method will be as good as those obtained by methods which use rest for a long period, with or without tuberculin, before the hardening by vigorous exercise is begun. A comparison made by Lawrason Brown as to the number of patients able to work three years after discharge, between those treated at the Brompton Sanatorium (the parent institution of the method of treatment by graduated labor), and those treated during the same period at the Adirondack Cottage Sanatorium (half of these latter having received tuberculin), shows that 60 per cent. of the Brompton Sanatorium cases, and 75 per cent. of the Adirondack Cottage Sanatorium cases are now working.

The Brompton Sanatorium cases represent 20 per cent. only of the patients admitted to a large hospital for consumption. These have been rigidly selected because they have shown fairly high resisting powers, and have already lost the symptoms of activity of disease while under treatment at the hospital. The Adirondack cases are also selected much more rigidly than are those of most sanatoria. Acute and advanced cases are refused, and those accepted have often had preliminary treatment in the town of Saranac Lake while awaiting admission.

* See Journal of the Outdoor Life, August, 1911.

In Ontario the need of the community has forced the several sanatoria to admit mixed grades of cases. As a rule it is only at the end of the relatively short term of treatment that a minor proportion of the cases are fit for a graduated labor "cure." The subsequent histories of discharged cases have not been followed up consistently in the older and larger institutions, so that the number able to work is not known. My impression, however, is that but few patients are fit for full work when discharged, About one-fifth may later take up full work and continue well; another one-fifth may continue well at modified work, and a third one-fifth may with care lead relatively comfortable semi-invalid lives. Dr. Holbrook of the Hamilton Sanatorium is able to report 44 per cent. of his discharged cases at work.

Outside of the province, in more recently built sanatoria, a more rigid selection of cases has been enforced, and discharged cases have been more consistently followed up. The several superintendents have been kind enough to write me about their results. Dr. Miller of the Nova Scotia Sanatorium reports 28 per cent. at full work and 45 per cent. at modified work. Dr. Byers, of the Laurentian Sanatorium reports 32 per cent. at full and 27 per cent. at modified work; Dr. Vrooman of the British Columbia Sanatorium reports 25 per cent. able to follow their occupations. Such comparisons can only be approximate, for many variable factors must influence the results.

The Adirondack Cottage Sanatorium reports 33 per cent. of the cases discharged during 25 years as well. Bardswell finds that in two English sanatoria for the middle classes, in which no strict selection was enforced, 28 per cent. of the discharged cases could do full work.

It is plain, therefore, that 7 out of 10 cases discharged from our average sanatoria have to be tenderly handled after their return home. Many may have the actual physical strength to do considerable work for a longer or shorter period, but it does not follow that they should work, and, if they do, a severe relapse is almost certain. To maintain the ability of a patient merely to care for himself, is better than to induce physical bankruptcy through overstrain, and, up to a certain point, better economy. Criteria of successful treatment differ somewhat, according to the critic's point of view. Capacity to work with arrest of the disease, a highly desirable condition to obtain, is from the economist's point of view the only successful result. The ability to keep the disease quiescent, and to live an ordinary life without being in any sense an invalid, with or without a modified working capacity, is a result fairly satisfactory to the patient and his relatives. From the patient's standpoint at least, the knowledge of how to live a relatively comfortable, semi-invalid life, avoiding the pitfalls that would mean disaster, is a result of sanatorium treatment not to be despised.

In Ontario the term "apparent cure" can be but rarely given to the result obtained at discharge. This term, used for the convenience of classification by the specialist, is from the patient's standpoint a rather unfortunate one. It has been unfortunate too for the sanatorium movement, as it has helped to bring sanatorium results under criticism. Woods Hutchinson amusingly remarks that consumption is so easily cured that it can be cured four or five times in the same individual. The patient, usually unable to appreciate fully the qualification of the word "cured" takes it seriously, and he and his friends promptly drop the qualifying word "apparent." The result obtained is thought to correspond with that obtained in other diseases, which, as a rule, are over and done with when the patient is cured, as, for instance, typhoid fever. The string that tuberculosis holds upon its subject is forgotten, and there is an immediate temptation to overstep the limits which the tuberculous subject must put upon his work and ambitions. Sanatorium treatment affords a relative cure only. The earlier and more limited the disease, and the more promptly treated the case, the better will be the result. The patient who has quickly lost the signs and symptoms of disease, and while at the sanatorium has attained a feeling of vigor and a robust appearance possibly never equalled in his previous life, is inclined to regard his recent illness lightly. The appreciation of this point is the crux of the problem of after-care. The consumptive is naturally an optimist, and it is well that one so constantly menaced in the future should have the mental qualities of hope and cheerfulness to a large extent, but he whose optimism is discreetly tempered by a fair realization of his frailty will live longest.

I frequently attempt to temper the optimism of a patient about to leave with a highly satisfactory result, by impressing upon him the contrast in the expectation of life of the average man, with that of the apparently cured or arrested case. Statisticians have shown that the apparently cured case is about twice as likely to die as the average normal person, and the mortality of the two classes grouped together is more than three times as great as in an average sample of population.

The patient just discharged enters upon his second great danger period. This danger is greater if he has not been under treatment long enough to reach a point where he can endure considerable exercise with safety. The first danger period was reached when he first began to take exercise. While at rest no risks were taken. The readjustment to home life, and probably to work, the effort he will make to impress upon others that he is to all intents and purposes a normal being, the calls upon his strength that simple convention will make, all come as a heavy and sudden strain.

Readjustment should be gradual, for unused faculties get easily fatigued. For some months following discharge supervision by a physician skilled in chest work, and with an appreciation of the detail important in the management of the consumptive, is quite as necessary as supervision in the sanatorium. Such expert advice should be sought at regular intervals, apart from the times that danger may threaten, and should be followed. Most desirable is it that the physician who has long followed the lung changes should still supervise, rather than one unfamiliar with the case. Unfortunately, this is possible only in a small proportion of cases. Optimism and reassurance are too apt to color the advice of a new medical attendant, which may encourage rather than restrain the too bouyant. On the contrary, encouragement to effort is equally necessary to the patient too much hospitalized and afraid of himself, and here too great restraint may often be advised, because the patient's chest does not seem to warrant exertion.

A lean purse is, after all, the main cause of relapse. It compels work, and really suitable employment is difficult to get. The personal equation of each patient should be considered in the adjustment of employment, but this is usually impossible. It was formerly the custom to advise a change of employment to every consumptive, as relapse was thought to occur most readily in that in which the disease was contracted. Outdoor work was especially advised. Light outdoor occupations cannot possibly be obtained for the many candidates, and most of such occupations make irregular calls for severe effort. Moreover, light duties are lightly paid, and the wage is insufficient for the bread-winner. A man does best and most easily that with which he is most familiar, and consequently he can usually win most comfort at least physical cost by following his proper calling.

An easy life at home must compensate for the hard work of the day. Little or no help in the household duties should be expected of the man who is already too fatigued by his work. The body must be allowed to make good the expenditure of the day, and energy must be stored up for the morrow. Rest, lying down out of doors, is the best tonic, and it is in the modified life at home that outdoor sleeping is most necessary. It is well worth while to go to some expense and trouble to make convenient provision for this. The required compensation cannot be found in heated and ill-ventilated rooms at home; in ill-ventilated theatres and churches, where there is also such excellent opportunity for contracting infectious colds; in the excitement of an evening party; nor even in strenuous conversation at home. Early hours of retiring should be kept, and a routine life should be fairly closely followed.

It is when the patient comes home from the sanatorium that he is forced to realize his limitations. Hitherto he has lived with those similarly handicapped. This, after the first rude awakening to danger, is probably his period of greatest unhappiness. He is obliged to realize that he no longer can keep pace with his former companions; that continual restraint is necessary in work and diversion; that his ambitions must be sacrificed or at least altered; and this, too, in spite of the fact that he may look less an invalid than any of his fellow workers or companions. As time passes he loses the sense of his limitations, fairly realized when he first came home, and a sense of false security results. He is then tempted to disregard the modified life at home which it is so necessary that he should lead outside of his working hours. *The hours away from work are for the average patient probably more important than those spent at work.* There are twice as many of them, and they must be spent to his best advantage, not altogether as Arnold Bennett would have them used, for energy must be conserved in hours of relaxation. *The consumptive, apparently cured, or with disease arrested, cannot afford to regard himself again as an entirely normal man.* Possibly he may be able to work at full pressure, or he may be able to play equally hard, or he may be able to work some and play a little, but he cannot do both as a normal person can and long continue well.

Home treatment is more difficult for the patient than sanatorium treatment. Home life is really antagonistic to taking the "cure." His own conscience and will must now be the patient's supervisors and the responsibility cannot be so easily shifted as it was formerly, to his physician. He must have certain moral qualities, or if he does not have them, he must develop them, else there will be failure. Courage, patience, self-restraint and cheerfulness are essential. Let him avoid, by all means, the gratuitous advice of the "know-it-all," both lay and medical. *A dollar cannot be better spent than by subscribing to the* JOURNAL OF THE OUTDOOR LIFE, a monthly magazine invaluable to the tuberculous patient of whatever grade. It will also inevitably influence the family in his interest.

It is essential that the immediate family should thoroughly understand what degree of recovery has thus far been obtained, what further amount may reasonably be expected, what are the patient's limitations, and wherein his danger lies. Both patient and relatives are too inclined to discount the weighed words of the physician. He may take the utmost care to make the relatives understand, but the words fall often on uncomprehending ears. The patient's very appearance belies the need of caution.

Family and friends play an important part in both after-cure and after-care, and their responsibility is no light one. They can help much by watchfulness and warding off temptation, by giving care in slight illness, not customary for the ordinary individual, and in modifying family life to meet the require-

ments of the patient's regime. In most instances, I am glad to say they help by cheer, encouragement, and tactful consideration. Indeed, their very anxiety to help one whom they think discouraged, and in need of being "bucked up" may be a disadvantage, as they press upon the patient means of enjoyment, light for them but fatiguing to him. He may often mentally exclaim, "preserve me from my friends." On the contrary, the patient frequently becomes the recipient of all family worries, his incapacity is impressed upon him, the expense that his illness has been, and the present drag upon the family purse are made all too plain. He is pressed too soon to become an earner, or else the hard, highly paid task is urged over that, safer and easier, but more lightly paid. Family selfishness is often the cause of a relapse. The necessary modifications in family life or in household arrangements are unwillingly or imperfectly carried out. No inconsiderable evidence of family selfishness may be seen frequently in the fear of him, and the stigma, as it were, of being a consumptive, leads even at times to family ostracism. The trained, conscientious consumptive, able to be up and about, should not cause fear, as he endangers no one. Precautions as to dishes, linen, disposal of expectoration, and personal association can all be easily carried out.

Both in family sacifice and in philanthropic work for the consumptive, economy and generosity are, frequently practiced at the wrong time. Humanitarian consideration may readily enough bring out sacrifice when it is evidently too late to do more than care for the comfort of the invalid, and unfortunately prolong a useless and dangerous life. If a part of this generosity had been given to prolong the treatment of a recoverable case, and make the result more sure, needless suffering might have been prevented and much happiness secured. This generosity is unfortunately often withheld when it could be readily given, for the need of the sick one is not sufficiently apparent to the unseeing eyes of an ignorant or prejudiced imagination. Even in the sanatorium the case worth while often needs extreme care during transient periods of slight or acute illness, but because he has been recently well and is not weakened by long illness, personal care is withheld, whereas the hopeless case, through the sympathy he excites, gets the nursing, when it matters little. This care for the latter should not be lessened, but that for the former should certainly be increased. The economics of the situation seem wrong. Similarly at home, a patient working and apparently well yesterday may have the incipient symptoms of a relapse to-day. A proper rest, promptly taken, for a few days, with the sacrifice of the immediate wage, may be the "stitch in time" which will save many months of illness.

The after-care of the consumptive is a social as well as a family and personal problem. With the delayed recognition of the disease that obtains at present, one-quarter to two-fifths of those reasonably well treated are able to work part or full time. There is need of reasonable consideration and willingness to help upon the part of employer and fellow-employees. The former should be willing, and, I am glad to think, very often is willing, to grant time for a temporary lay-up when relapse may threaten, and to make the worker with uncertain health free of anxiety about losing his place. The fellow employee should be kinder than he often is to one who has been named consumptive. Distressing stories of loss of position are frequent, because the patient has been treated in a sanatorium, and we even know of trained and conscientious consumptives being obliged to discontinue the safe and proper mode of disposing of sputum, because of the antagonism of their fellow employees. This ignorance causes the consumptive to become again a menace to the public health, because he simply has to hold his job. Can we blame the consumptive? We demand much of him and give him but little help, sympathy or consideration. Public panic puts a premium upon secrecy and the deliberate neglect of obvious but necessary hygienic measures.

For the social worker there is great opportunity in the after-care problem. The care of the family, when means are lacking, until the bread-winner can safely get back to work is of first importance. Bureaus of information regarding the possibilities of suitable employment are needed. The provision for the worker, without adequate home facilities, of night camps, with good meals at the beginning and end of the day, and of farm colonies, in which supervised labor hardens the convalescent too soon discharged from the sanatorium, should be responsibilities for the municipality. Likewise, the provision of adequate dispensaries with visiting nurses for the continued supervising of the discharged cases of fresh air schools, and hygienically built houses,—these are municipal responsibilities, as necessary to solve the problem of after-care as that of prevention.

If the tone of this article seems somewhat pessimistic, it is only because too often we who work with tuberculosis see a good case needlessly brought to irrecoverable illness, simply through indiscretion, because the patient has over-estimated his strength. Our optimism regarding the possibilities of the sanatorium, properly used for the right kind of cases, is by no means diminished, nor are we discouraged about the possibilities of a long and happy life for the patient if its teaching is thoroughly put into effect.

In the after-care problem the patient by exercising consistent watchfulness and self-restraint must himself be master of his fate, but we, the public, made up of relatives, friends, employers, fellow employees, and physicians, have our share of responsibility in lessening the "menace of the years" and in helping his "unconquerable soul."

SOCIAL ACTIVITIES OF BELLEVUE TUBERCULOSIS CLINIC

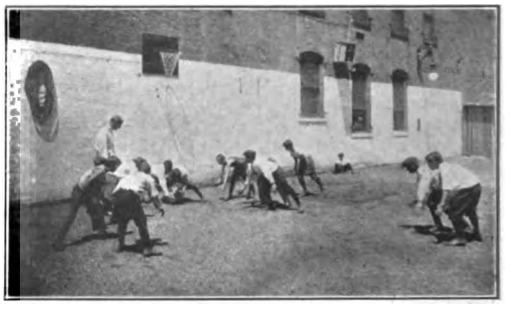
BY MISS SARA E. SHAW,
NURSE IN CHARGE, NEW YORK

The Bellevue Tuberculosis Dispensary is constantly responsible for several hundred afflicted people. The policy of the clinic is to secure immediate treatment for all positive cases. The patients are urged to enter sanatoria or hospitals according to the stage of disease. If vacancies cannot be obtained in institutions, temporary provision may be made at the Day Camp "Southfield" and at the Night Camp for women.

When those eligible for institutions are cancelled from the list, many yet remain. There are, for instance, the non-citizens who cannot be admitted to public institutions; the mother who refuses to leave her children; those on the border line between sickness and health; and members of families exposed to infection. How to meet the individual needs of so great a number is a difficult problem. Thorough home visiting is of course, necessary, but if adequate time be spent in one place, someone may be neglected elsewhere. During her daily rounds, the observing worker discovers similar evil tendencies and troubles in visit after visit.

If the season be Winter, fresh air is banished; the bath is considered a dangerous luxury and is indefinitely postponed. If Mike, Tony or Jake becomes too dingy and sticky, he is rubbed off with a dirty, damp rag, *a la mode* the stove, or any bit of furniture. The darkest corners are chosen for sleeping quarters. The only sunny or airy room is a storehouse for bric-a-brac, life-sized portraits, upholstered furniture, altogether a wonderful assortment of dust catchers. The meals are irregular, frequently consisting of bread with tea, coffee, or beer, and perhaps some delicatessen knick-knack. The wage-earner is unskilled, and through drink or inefficiency the income is uncertain. The wife does not understand the rudiments of home-making or mother-craft. On the whole, these sickly families offer little or no resistance to the invasion of tuberculosis.

GARDENING KEEPS THE BOYS OFF THE STREET



"THE GAME'S THE THING"

Not all of the members in these families should be counted unworthy however. A goodly portion have chosen hard tasks, and day after day they work long hours in sunless, airless shops. The wife constantly struggles with low wages and the high cost of living to keep the family in normal physical condition, but despite her brave efforts, disease creeps in, attacks the father, mother or child. Courage wanes, and hope and struggle give way to despair and indifference. Even then, some will not be convinced that they are sick. They object to interference

with their pet plans and lock the door. They wish to be let alone, and the visitor is accordingly numbered with the dogs and peddlers.

Here is an opportunity for the dispensary to perform a service, which may ward off tuberculosis from the lives of hundreds. Homes may be preserved intact, and needless suffering and loss prevented. What is needed is not so much medicine or even medical aid. The clasp of a hand, the kindly word, the friendly advice and suggestion, or even the sterner command and instruction, will do more to help in some of these cases than anything else.

As a part of the machinery of social service, classes of various kinds have been organized, and certain forms of recreation and amusement have been adopted.

For the patients who can be taught to keep records and follow carefully the course of treatment, there is a special medical class, on the lines of the ordinary tuberculosis class.

For those who cannot speak English, for the obstinate and irresponsible, general social service classes are formed. To these classes relatives and friends are also invited. In the German class, talks are given in German, and in the Italian class, in Italian. The work in these classes embraces the following subjects:

(1) Personal hygiene, including care of the teeth, shampoos, baths, exercise and fresh air;

(2) Diet, including food values, preparation of plain dishes, proper way of serving meals, etc.;

(3) Sanitary home furnishing; how to clean, dust, sweep, etc.; and

(4) Care of children; lessons in practical nursing.

What has a sewing class to do with hospital work, is a frequent query. It is customary in this group of patients in frosty weather to begin to fear the cold. The head is hidden, and the respiratory organs are at once hermetically sealed in warm wraps. A few lessons, therefore, in the proper application of clothes may afford as much relief as the proper application of plaster or poultice. If patients take the cure day and night in the open air, they must be suitably clad. In the sewing class the well may labor for the sick. A heterogeneous mass of second-hand garments may be remodelled into comfortable wearing apparel. This class also promotes efficiency and creates new interests.

The Girls' Class meets every Saturday afternoon. The girls are ten to fifteen years of age, and call themselves "The Do Well Club." They receive instruction in cleaning, cooking, sewing, care of children, first aid, etc., and incidentally they have a happy time. They are becoming enthusiastic little home-makers.

A LESSON IN PATRIOTISM

The Bellevue Settlement House, equipped and maintained by the Woman's Auxiliary, is a valuable resource for these social activities. Here all classes are held. Here all lessons can be practically illustrated. Here it is possible to form some conception of an ideal home.

In our plans for the family as a whole there is a lively factor that can not be forgotten, the big boy. Often he is the substitute for the invalid father. He takes up the

financial burdens, lays aside the bright visions of youth, takes out working papers, and joins the ranks of the unskilled. Again, he may be the family worry. No one knows where to find him. Sometimes he is with street gangs, and sometimes in a cellar, gambling or smoking. When the elusive lad is caught and questioned as to the cause of his delinquency, he usually has a valid reason, generally this, "No room to play games nowhere." If he stays in the home "something always busts and its blamed on me."

DRESSMAKING CLASS AT WORK

Realizing the need of the boy in crowded homes, a member of the Auxiliary has supported the Boys' Club. The rooms in a rear tenement house are cheery and homelike. Here the boys gather during winter evenings, play games, tell stories, pop corn or serve sandwiches and cocoa. Once a week a carpenter class is held. One evening a week is devoted to health topics. Club members make maps of streets; report unsanitary conditions, dirty cellars, halls and courts; and black-list stores where poor and impure foods are sold. A public-spirited property owner has given the use of a vacant city lot to the club and has generously provided funds for converting the lot into a garden and playground. The club rooms and gardens are also headquarters for patrol No. 78, Boy Scouts of America. The patrol is fortunate in having a scout-master who teaches the real art of outdoor life. The physical training and fine ethical code are forces for making strong, manly men of these future citizens, real champions of a clean city.

Thus an effort is made to arrange patients and members of families in congenial groups.

GIRLS' CLASS

The classes are reorganized from time to time and methods are changed as the character and needs of patients change. The lessons are all short and simple, and are followed by a social hour. Refreshments, flowers, or music usually add to the good cheer. Neighborly chats also afford opportunities for stamping out foolish prejudice, destroying faith in fads and fake cures and swerving sentiment in right direction.

The work may be tedious; the results may be slow; nevertheless it is the duty of the clinic to provide stepping-stones to a higher standard of living.

THE MEANING OF REST*

BY WILL M. ROSS, STEVENS POINT, WISCONSIN

AUTHOR OF "MY PERSONAL EXPERIENCE WITH TUBERCULOSIS"

Curing tuberculosis in the first person singular is very much of a business, and like any other business, to be successful, must be managed on sound business principles. Slipshod methods and incompetency inevitably result in bankruptcy with no assets. Moreover, it is a business where one must "paddle his own canoe;" it admits of no partnerships because the profits are a human life, and a life cannot be split up and doled out like a ten per cent. dividend. The doctor and family of the patient are merely clerks in the enterprise; they may advise, but it is the business head who is responsible, and must take the consequences of action, be it good or bad. The sooner the tuberculous patient makes up his mind that he has a real job on hand, if he expects to get a stopover on his ticket to eternity, and gets down to business, the sooner and surer will be his success.

But there must be more than a determination—there must be a thorough knowledge of methods. Beginning with the fundamental doctrines of "fresh air, wholesome food, and rest," the patient must learn how to apply them to the cure, and he soon finds that there are hard and fast rules which must be followed. It is because of placing his own interpretation on what constitutes fresh air, what constitutes wholesome food, and what constitutes rest and the minor details of the cure, that the average patient loses his or her fight. The world wide crusade against tuberculosis has made nearly everyone familiar with the requisites of the cure, but it is a superficial familiarity, for the people who are, in reality, properly informed, are few indeed. For the purposes of this article only the subject of rest has been selected, as being, perhaps, the one in which the greatest extreme of error may be found.

It is doubtless safe to state that no single factor has mitigated more against the success of the so-called "home treatment" of tuberculosis than a misconception of the meaning of the word "rest," a misconception arising in part from a failure to be explicit in their directions on the part of those whose mission it is to advise the sufferer with tuberculosis, be they doctor, nurse, or social worker. Too great dependence is placed on the patient's ability to judge for himself the true course to pursue. On the other hand, the fact that tuberculosis sanatoria have made "rest" the subject of scientific study, has aided materially in proving their ability to cure a very large proportion of cases entrusted to their care. Numbers of physicians of prominence have declared "home treatment" of tuberculosis impracticable, even impossible, without some preceding sanatorium training, and results tend to prove their assertions. Yet there is really no reason at all why tuberculosis is not curable at home, if the patient be properly and thoroughly instructed in the cure and held true to his course. This proviso, it must be admitted, presents a difficulty in which the home cannot compete successfully with the sanatorium, where "backbone" is "made to order," and the patient is held to his guns whether he likes it or not. But all the sanatoria on earth cannot cure an unwilling subject, while, other things being equal, the man who is determined to win out, can do so at home, providing he knows the rules of the game.

When a physician, having confirmed the diagnosis of tuberculosis, sums up the requirements of the cure to a patient about like this: —"Um, now let me see—of course you'll have to arrange to sleep out doors, or at least in a well ventilated room—got to have plenty of air, you know—as to your diet, just stick to the good wholesome foods, and see that you have plenty of them—three good big meals a day will just about fill the bill, with a lunch or two if you can take them—and get plenty of rest—yes, you'll have to cut your exercise out entirely for a while, and just stick to the rest game, that'll fix you up all right"—he may feel that he has done his whole duty toward his patient.

But in carrying out his instructions, unless they have been made much more explicit, it

*This article is reprinted from the June, 1911, number of the Journal of the Outdoor Life, the entire edition of which is exhausted.

is doubtful if two patients would ever follow them alike. The counsel as to "fresh air" admits of but little possibility of mistake, yet some people's ideas of what is "plenty of air" are pitifully cramped, so that we must allow for the possibility of error. In the case of arranging a proper and adequate diet, possibility of error becomes a probability, but on the question of rest, probability merges almost into certainty. For, in order to secure the desired results from this third member of the triumvirate, "rest," the directions must be explicit and absolute.

Why? Because to the average mortal, rest may mean an endless variety of conditions. It is a word of a thousand and one meanings. To one person the idea of complete rest is to lie down for a few minutes reading from a favorite book; another considers an after-dinner cigar in his comfortable arm chair as the essence of solace and bodily ease; another enjoys a "stretch" on the davenport while chatting with members of the family, and finds it restful; and to still another a spin in the park in an auto brings quiet to tired muscles and jaded nerves. These are but a few of the methods that man finds restful to a normally healthy body. But unless he is more wisely directed, he will naturally believe that what was "rest" to him in health will be "rest" in invalidism, with the danger, that, through falling into this natural error, he may be allowed to retard or even prevent his recovery as the price of so easily corrected ignorance. The error that many fall into, is in confusing rest with some of the many forms of recreation.

ALL WORK AND NO PLAY MAKES THE CURE A DULL HUNT
(Patients at Blue Mound Wisc.)

Hence it is necessary that we standardize our meaning of "rest" to fit the case of the person suffering with tuberculosis. The mat-

ter is an important one, equally as vital as the proper regulation of the other requisites of the cure, for it has been very clearly demonstrated that the cure depends not on any single one of the major necessities, "fresh air, wholesome food, and rest," but on *all* of them, sensibly applied and regulated.

Every tuberculous patient, regardless of the stage of his disease, should have from one-half to a full hour's rest following each meal (with the possible exception of the evening meal), during which he should lie quietly, alone, on a bed or reclining chair out of doors, with the eyes closed, and the mind free from matters of import, making an effort to sleep, if possible. This is a condition of "absolute rest," the requirements of which are not complied with if the patient reads, talks, etc. The patient will scarcely disregard the rule when he understands that a complete relaxation, such as is demanded, is worth double or triple that of a rest which is not "absolute." It should also be noted that this period of rest, to secure the greatest benefit, must follow immediately after meals. A number of carefully conducted experiments made in a sanatorium some time ago demonstrated that patients who were allowed to take fifteen minutes' exercise following meals and preceding the rest hour, developed temperatures, which did not appear when they went to rest at once. The digestive functions commence as soon as the food reaches the stomach, and the task is made heavier for them if other portions of the body are being exercised while the food is undergoing digestion. The exception noted above regarding the evening meal is made because of the proximity of the retiring hour when the patient will secure a full night's rest; it is argued on this account that the shorter period may be dispensed with, though the patient will doubtless retain the short rest with profit.

A short "absolute" rest period, of from fifteen to thirty minutes should also be taken before meals, to rest the body and prepare the stomach for its work.

With the exception of the above periods, which should be in the schedule of every tuberculous patient, the balance of the day's rest will be apportioned according to the requirements of the individual case. The patient with temperature or high pulse, who is confined to his bed, will hold as closely to the "absolute" rest as his will-power will permit, knowing that the greater his persistency, the sooner and surer will he be rewarded with a normal record. To a patient on exercise, greater latitude is given. He may find it to his benefit to continue his rest over the hour, or perhaps to fill in the time to the temperature hour in reading or writing, or again, his exercise may be taken immediately. A number of sanatoria demand a fixed number of hours light manual labor daily, following the rest periods, and under a physician's supervision.

These, then, embody in brief the requirements of rest demanded in tuberculosis sanatoria, varying in details to fit the individual requirements of the several sanatoria, but agreeing in the essentials. What has been found to be correct sanatorium procedure may be depended upon to be correct in home treatment, and there is nothing in the above conditions which cannot as easily be carried out successfully at home as in the sanatorium.

We obtain nothing worth while without working for it; no business ever began to show a profit before work had been spent in it. The period of infection with tuberculosis is not a vacation. It is a twenty-four-hour-a-day job. True, it is a period of idleness, but one of intelligent, directed idleness. *The day's work should consist of rest; rest should be the only business on hand.* The light exercise, or hour of reading should be considered as the reward for a good day's work, like the evening of slippered ease to the tired business man at the end of the day. This recreation, however, should be considered only as an incidental result of the patient's work, not the main object. No business precepts have ever been written for the benefit of the ambitious young man which advise him to spend his day in planning for the evening's enjoyment. Business isn't built that way; it counsels him to "Get busy, and keep your eyes off the clock." This advice fits just as well in the business of beating tuberculosis as it does in selling merchandise.

EXAMINATION OF EMPLOYEES FOR TUBERCULOSIS*

BY THEODORE B. SACHS, M. D.,

MEDICAL DIRECTOR, EDWARD SANATORIUM OF THE CHICAGO TUBERCULOSIS INSTITUTE

It is to the interest of the employer, the employee and the community at large, that every case of "open" tuberculosis in a working-place should be known and controlled, that diagnosis should be made early in workers with active tuberculosis and that proper cognizance should be taken of the workers with low resistance due to latent tuberculous infection or other causes.

Detection of these groups of cases among employees requires the operation of a system of examinations, the watchword of which should be "early diagnosis."

The conception of the term "early diagnosis" has undergone considerable transformation during the last two decades. The tendency is toward earlier recognition of the disease. The case considered "incipient" today is more incipient than that of twenty years ago.

It is in the interest of the community that tuberculous infection in individual cases be recognized and proper treatment instituted long before the characteristic symptoms appear and that proper cognizance and adjustment be made in the case of the large group of individuals lacking the average degree of resistance (the so-called "predisposed").

Among the agencies promoting early diagnosis of tuberculosis, tuberculosis dispensaries occupy a foremost place, first, through their continuous emphasis in their educational campaign upon the importance of early diagnosis; second, by furnishing free medical examination to those unable to employ a private physician; third, by extension of the examination to all "contacts" in homes in which a case of tuberculosis is discovered.

Important as the dispensaries are, they deal, to a great extent, with individuals whose condition is either grave enough to arouse in them a fear of possible presence of tuberculosis or who are so impoverished by the disease that they cannot afford the services of a family physician. An analysis of dispensary statistics will show more or less long periods of impairment of health or even invalidity in a large percentage of cases before their appearance at the dispensary.

Early diagnosis, as we understand it today, should be the diagnosis of the infection in the individual, long before he feels really sick: In the worker, while he is at work, in the child while it is at school, etc.

To render "early diagnosis" possible, we must possess the machinery for diagnosing the disease at a time when the individual may not even suspect its possible presence. The medical profession at large, the factory and school physician, the dispensaries and the family are the important factors in early diagnosis of tuberculosis in a community.

The right conception and an agreement on the part of the four (the dispensary, family, factory and school physician) as to what is "incipient" tuberculosis and the determination on the part of the community to provide the necessary machinery for diagnosis in all cases and under all conditions are very essential to the gradual solution of the tuberculosis problem.

As stated above, early detection of tuberculosis in an employee is of great importance to himself, his co-workers and his employer. It means a better and, at times, the only chance of recovery; it means prevention of infection in others and an uninterrupted or a longer period of usefulness of tried and experienced men.

It is impossible to foretell at present the ultimate source of provision for the early detection of the disease in workers. The signs of the times point to the eventual recognition by the State of this provision as one of the sanitary requirements in every working-place, the expense being borne by the State, the employer, the employees, or by all three combined.

In Chicago, it appeared to me, that the introduction of a system of examination of employees for tuberculosis should be attempted at the point of least resistance, namely, in concerns possessing welfare provisions for workers (employees' benefit associations or various other provisions which point to an enlightened attitude of a firm toward its workers, etc.). The ultimate object is to see the membership of the employees' benefit association gradually extended to the entire working force or a large proportion of it and to make the examination of the employee for admission to such associations and, later, in time of illness, so comprehensive as to gather any cases of tuberculosis existing in the place.

A general provision for examination of all suspicious cases is, however, necessary even with the benefit association including the en-

*Read before the Eighth Annual Meeting of the National Association for the Study and Prevention of Tuberculosis, Washington, D. C., May 31, 1912.

[illegible] each working place [illegible] the [illegible] should have a physi- cian [illegible] the supervision of the [illegible] and hence early detection of [illegible] cases. At [illegible] and has to be [illegible] by the employer himself or [illegible] employees.

[illegible] for introduction in working [illegible] a system of examination for tuber- [illegible] should be given and [illegible] taken of the pre-existing [illegible] "welfare" arrangement, so ad- [illegible] the details of the proposed system of [illegible] as to insure its early introduction and successful development.

The important thing in Chicago, as it would be in any other city, was to interest the employer in the necessity of such examinations. The chief obstacle to the introduction of any system was the lack of information on the part of the employer that there is any such thing as a tuberculosis problem, in his place, as well as the lack of appreciation on his part that any benefit can accrue to the firm through the operation of such a system.

In making the appeal to the employers, I have placed emphasis on the financial loss sustained by the employer through the imperceptibly growing reduction of working power in the early stages of the disease, the danger to the entire working force from the unknown, uncontrolled "open" cases of tuberculosis, the constant infection of other workers, the subsequent loss of experienced men, the reduction of the general efficiency of the entire working force through the existence of uncontrolled sources of infection, etc. In our campaign we were materially assisted by the humanitarian attitude of the employers toward their workers.

Early in the campaign, I devised a chart which proved of value in the conferences between the committee on Factories of the Chicago Tuberculosis Institute and the employer whom we were eager to enlist. The chart, as here reproduced, shows in concentric circles the various groups of tuberculosis cases, which you would expect to find in a working place; the size of the circle showing in a general way the relative number of workers included in each group and the degree of shading pointing to the relative importance of the group from a sanitary standpoint.

It is very essential to make it clear to the employer that systematic examination of employees for tuberculosis will disclose not only the "open" and "active" cases of tuberculosis, the [illegible] of the majority of which lies in institutional treatment, but also the larger group of workers in whom a predisposition exists either because of latent infection or because of malnutrition, anaemia, etc. One of the most important objects of the examinations [illegible] is to raise the resistance of these groups by proper medical advice, education in right living and change in occupation if necessary. By the spread of this education in "right living" among the employees, the final result is "a higher standard of health and efficiency of the entire working force."

Plan of Examination of Employees.

From the standpoint of prevention of tuberculosis among workers and the preservation of their efficiency, the best policy would be the application of medical examination to all new employees for the purpose of eliminating any existing disease and determining their physical fitness for the given task, the examination being repeated at certain intervals or whenever any suspicious signs arise. This, of course, is impossible under the present conditions, though the tendency is in that direction. As conditions exist at present, the general principle of examination of employees for tuberculosis should be agitated in all working places. The size of the place will determine, however, the feasible arrangement for such examinations.

In smaller establishments it is desirable that the employer or foreman be made familiar with the various manifestations of incipient tuberculosis, that information on this point be disseminated among workers and that those unable to pay for medical services should know where to secure a free examination. Smaller establishments may engage a physician for a part of his time, or combine with other establishments for this purpose. Whatever arrangements are made, abuse of medical charity should be avoided and co-operation should be established and maintained between the physician representing the firm and the family physician of the worker.

In larger establishments the work of examination for tuberculosis should be either assigned to the physicians already in the employ of the firm or to a new man appointed to attend to the tuberculosis cases exclusively.

Finally, the plan should resolve itself into making an examination for tuberculosis an important feature of the general medical examination.

The details of the plan submitted to the Chicago Tuberculosis Institute one year ago and since then advocated under the auspices of its Committee on Factories are as follows

1. Physician to examine all suspicious cases.

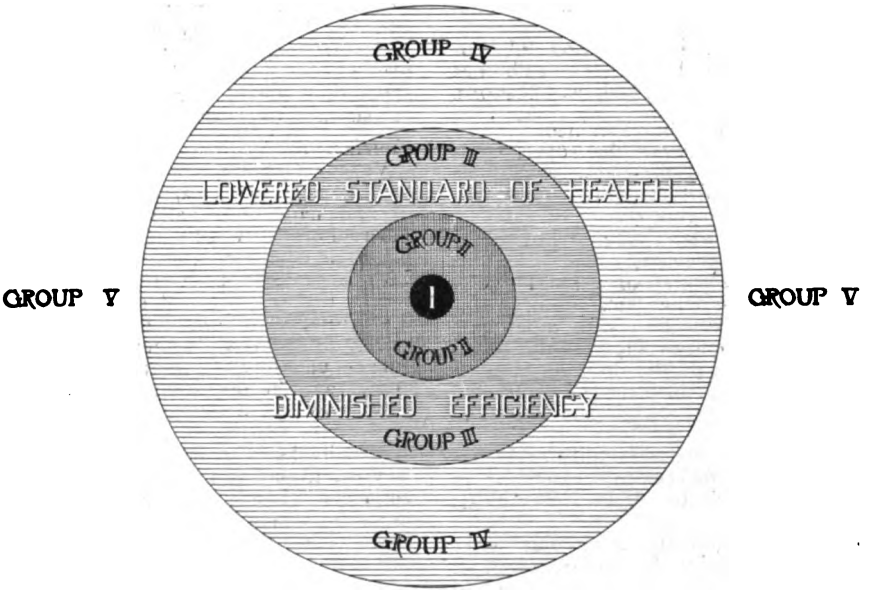
In places with established medical service, this task may be assigned to the physician on the staff of the firm. In large establishments a special "tuberculosis" examining physician may be necessary. In either case, possession of special experience in the diagnosis of tuberculosis is very important.

Duties of the physician: examination and diagnosis of cases; disposition of those found tuberculous; instruction of the sick in the essentials of treatment and of the "predis-

The TUBERCULOSIS PROBLEM IN A WORKING PLACE

by Theodore B. Sachs

GROUPS OF WORKERS



CONDITION		REMEDY
GROUP I Tuberculous.	"Open" Communicable Cases.	Periodic Medical Examinations.
GROUP II Tuberculous.	Disease Active. Progressive.	Right Conditions for Entire Working Force.
GROUP III Tuberculous.	Disease Inactive.	Education of All in Right Living.
GROUP IV	Workers With Low Resistance.	Hospital & Sanatorium Treatment for Groups I, II & part of III.
GROUP V	Workers in Average Health.	

RESULT

HIGHER STANDARD of HEALTH AND EFFICIENCY

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tire working force. Eventually each working place or several together (according to the number of employees) should have a physician who shall act as the sanitary officer and whose duty shall be the supervision of the health of the workers and hence early detection of disease in individual cases. At present a provision of this kind has to be financed, either by the employer himself or in conjunction with his employees.

In campaigning for introduction in working places of a system of examination for tuberculosis, due cognizance should be given and full advantage taken of the pre-existing medical or "welfare" arrangement, so adjusting the details of the proposed system of examinations as to insure its early introduction and successful development.

The important thing in Chicago, as it would be in any other city, was to interest the employer in the necessity of such examinations. The chief obstacle to the introduction of any system was the lack of information on the part of the employer that there is any such thing, as a tuberculosis problem, in his place, as well as the lack of appreciation on his part that any benefit can accrue to the firm through the operation of such a system.

In making the appeal to the employers, I have placed emphasis on the financial loss sustained by the employer through the imperceptibly growing reduction of working power in the early stages of the disease, the danger to the entire working force from the unknown, uncontrolled "open" cases of tuberculosis, the constant infection of other workers, the subsequent loss of experienced men, the reduction of the general efficiency of the entire working force through the existence of uncontrolled sources of infection, etc. In our campaign we were materially assisted by the humanitarian attitude of the employers toward their workers.

Early in the campaign, I devised a chart which proved of value in the conferences between the committee on Factories of the Chicago Tuberculosis Institute and the employer whom we were eager to enlist. The chart, as here reproduced, shows in concentric circles the various groups of tuberculosis cases, which you would expect to find in a working place; the size of the circle showing in a general way the relative number of workers included in each group and the degree of shading pointing to the relative importance of the group from a sanitary standpoint.

It is very essential to make it clear to the employer that systematic examination of employees for tuberculosis will disclose not only the "open" and "active" cases of tuberculosis, the solution of the majority of which lies in institutional treatment, but also the larger group of workers in whom a predisposition exists either because of latent infection or because of malnutrition, anaemia, etc. One of the important objects of the examinations, the employer is told, is to raise the resistance of these groups by proper medical advice, education in right living and change in occupation if necessary. By the spread of this education in "right living" among the employees, the final result is "a higher standard of health and efficiency of the entire working force."

Plan of Examination of Employees.

From the standpoint of prevention of tuberculosis among workers and the preservation of their efficiency, the best policy would be the application of medical examination to all new employees for the purpose of eliminating any existing disease and determining their physical fitness for the given task, the examination being repeated at certain intervals or whenever any suspicious signs arise. This, of course, is impossible under the present conditions, though the tendency is in that direction, As conditions exist at present, the general principle of examination of employees for tuberculosis should be agitated in all working places. The size of the place will determine, however, the feasible arrangement for such examinations.

In smaller establishments it is desirable that the employer or foreman be made familiar with the various manifestations of incipient tuberculosis, that information on this point be disseminated among workers and that those unable to pay for medical services should know where to secure a free examination. Smaller establishments may engage a physician for a part of his time, or combine with other establishments for this purpose. Whatever arrangements are made, abuse of medical charity should be avoided and co-operation should be established and maintained between the physician representing the firm and the family physician of the worker.

In larger establishments the work of examination for tuberculosis should be either assigned to the physicians already in the employ of the firm or to a new man appointed to attend to the tuberculosis cases exclusively.

Finally, the plan should resolve itself into making an examination for tuberculosis an important feature of the general medical examination.

The details of the plan submitted to the Chicago Tuberculosis Institute one year ago and since then advocated under the auspices of its Committee on Factories are as follows

1. Physician to examine all suspicious cases.

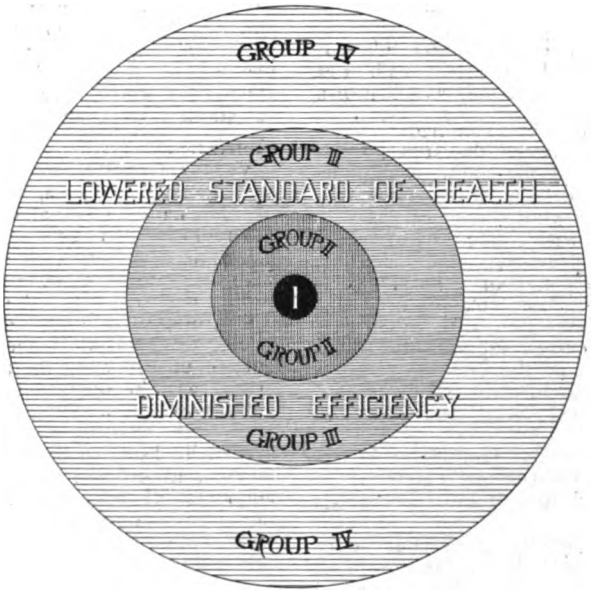
In places with established medical service, this task may be assigned to the physician on the staff of the firm. In large establishments a special "tuberculosis" examining physician may be necessary. In either case, possession of special experience in the diagnosis of tuberculosis is very important.

Duties of the physician: examination and diagnosis of cases; disposition of those found tuberculous; instruction of the sick in the essentials of treatment and of the "predis-

The TUBERCULOSIS PROBLEM IN A WORKING PLACE

by Theodore B. Sachs

GROUPS OF WORKERS



CONDITION		REMEDY
GROUP I Tuberculous.	"Open" Communicable Cases.	Periodic Medical Examinations.
GROUP II Tuberculous.	Disease Active, Progressive.	Right Conditions for Entire Working Force.
GROUP III Tuberculous.	Disease-Inactive.	Education of All to Right Living.
GROUP IV	Workers With Low Resistance.	Hospital & Sanatorium Treatment for Groups I, II & part of III.
GROUP V	Workers in Average Health.	

RESULT

HIGHER STANDARD of HEALTH AND EFFICIENCY

For Copies of This Poster Apply to the Committee on Factories of The Chicago Tuberculosis Institute

posed" in right living and in measures tending to increase the general resistance; frequent noon or evening talks to the entire working force on maintenance of health and prevention of disease.

The hours of work of the physician are determined by the extent of the problem, one, two or more afternoons a week, or a regular daily service. Compensation should be graduated according to the amount of work and the individual qualifications.

2. Trained nurse to assist the physician.

Duties: to assist the physician during clinic hours; to visit and study the homes and living conditions of employees pronounced "tuberculous" or "predisposed;" to instruct in the fundamentals of right living and in the methods of care and prevention, by actual demonstration in the employee's home; to gather in each individual case information essential to its right solution.

Compensation: that of a visiting tuberculosis nurse, regulated by the responsibilities of the position and individual qualifications.

3. Classes of cases to be examined.

At a conference between the superintendent, the physician and the nurse it may be agreed that the working force is to be watched for the following classes of cases:

(a) Employees in whom diagnosis of tuberculosis was previously made.
(b) Employees whose poor general condition (malnutrition, anaemia or weakness) in connection with other suspicious symptoms suggests the possible presence of the disease.
(c) Employees with histories of protracted (or recurring) cough and expectoration.
(d) Employees in whose families or homes a case of tuberculosis exists or in which a death from tuberculosis occurred.

In large establishments, a circular letter may be sent, previous to the conference, to all superintendents or foremen, calling attention to the above mentioned classes of cases and explaining the object and scope of the proposed examinations.

4. Tuberculosis Clinic:

With the compilation of a list of suspicious cases, a tuberculosis clinic may be established on the premises of the firm, in which all such cases are subjected to a thorough medical examination.

Each individual case is classified, (a) according to diagnosis: "tuberculous" or "non-tuberculous," "active" or "non-active," "open" or "closed;" (b) according to necessity of change of occupation or discontinuance of work; (c) according to need of hospital, sanatorium or home treatment.

The solution of each case problem is considered after a full analysis of all its medical and social aspects.

At times some difficulty may be encountered in persuading an individual member of the force to undergo the examination, but, as in all matters, diplomacy and kindness will overcome all obstacles.

Besides serving as a diagnostic station, the clinic maintains continuous supervision over (a) employees classed as "predisposed;" (b) employees returned to work, with disease "apparently cured" or "arrested" by institutional or home treatment; (c) employees taking "home treatment" and assigned to the clinic by the employer.

Since the submission of this plan to the Chicago Tuberculosis Institute a year ago, a systematic campaign for its adoption by industrial concerns in this city has been carried on by its Committee on Factories. At present the plan is in operation in shops and offices of the International Harvester Company; Montgomery Ward & Company, and the Chicago Telephone Company, and has just been adopted by Swift & Company. The firm of Sears, Roebuck & Company has for some time given special attention to tuberculosis in their examination of employees.

Conclusion.

Very important considerations prompted the campaign in Chicago for the introduction of systematic examination of employees for tuberculosis: (1) The realization that *early* diagnosis of tuberculosis can be best attained with a system of examination of working people, that will detect the disease long before the pronounced symptoms manifest themselves, detected while they are at work frequently unsuspecting the presence of any disease; (2) The operation of a system of examination in a working place and the knowledge of the existing conditions gained thereby eventually leads to the improvement of sanitary conditions and enlists the support by the employer of adequate and efficient institutional provision for the treatment of tuberculosis (the employer's interest in the anti-tuberculosis campaign is of vast importance); (3) The further realization on the part of the workers, employers and the community at large of the present utter helplessness of a worker in the case of illness will lead to more comprehensive measures for the protection of the worker and his family in the case of his illness.

Experience in anti-tuberculosis work in a community teaches us that support of any element in the community can be permanently gained by a clear demonstration of the relation of that element to the existing problem and this is becoming apparent in our present campaign in Chicago. Those who wish to get further details of the plan in operation may write for a pamphlet on this subject to the Chicago Tuberculosis Institute, Otis Building, Chicago.

To summarize, the aim of the proposed plan of examination of employees for tuberculosis is, first, detection and suppression of sources of infection in the working place;

second, detection of cases of the disease in the curable stages; third, guidance of all employees predisposed to the disease and of those who are re-employed after having recovered their health by sanatorium or home treatment; fourth, guidance of all employees in right living and methods of prevention.

The watchwords should be: education, detection, control. The hand of the engineer is on the throttle of the manufacturing machinery; the hand of the physician should be on the health of the working force. A higher standard of health means greater efficiency.

TUBERCULOSIS CARRIERS

BY GERALD BERTRAM WEBB, M. D.,

CONSULTING PHYSICIAN TO CRAGMOR AND SUNNYREST SANATORIA, COLORADO SPRINGS, COLO.

"The thorns which I have reap'd are of the tree
I planted—they have torn me—and I bleed!
I should have known what fruit would spring from such a seed."—Byron.

The public through the lay press have been made very familiar with some types of disease carriers such as typhoid, and the soubriquet "Typhoid Mary" is now a common garden appellation, yet so little has been written of the tuberculosis carrier that it is in an effort to awaken the public to this danger that this short sketch is written.

The accompanying paragraphs from Radot's "Life of Pasteur"—a work which Sir William Osler once alluded to in an address concerning tuberculosis, as reading like a fairy tale—contains I believe reference to the first experiments ever performed which foretell the discovery of disease carriers. A new microbe now became the object of the same studies of culture and inoculation as the bacillus anthracis. Readers of this book may have had occasion to witness the disasters caused in a farmyard by a strange and sudden epidemic. Hens, believed to be good sitters, are found dead on their nests. Others, surrounded by their brood, allow the chicks to leave them, giving them no attention; they stand motionless in the center of the yard, staggering under a deadly drowsiness. A young and superb cock, whose triumphant voice was yesterday heard by all the neighbors, falls into a sudden agony, his beak closed, his eyes dim, his purple comb drooping limply. Other chickens, respited till the next day, come near the dying and the dead, picking here and there grains soiled with excreta containing the deadly germs: it is chicken cholera.

Pasteur tried the effect of this microbe on guinea-pigs which had been brought up in the laboratory, and found it but rarely mortal; in general it merely caused a sore, terminating in an abscess, at the point of inoculation. If this abscess were opened, instead of being allowed to heal of its own accord, the little microbe of chicken cholera was to be found in the pus, preserved in the abscess as it might be in a phial.

"Chickens or rabbits," remarked Pasteur, "living in the society of guinea-pigs presenting these abscesses, might suddenly become ill and die without any alteration being seen in the guinea-pigs' health. It would suffice for this purpose that those abscesses should open and drop some of their contents on the food of the chickens and rabbits.

"An observer witnessing those facts, and ignorant of the above-mentioned cause, would be astonished to see hens and rabbits decimated without apparent cause, and would believe in the spontaneity of the evil; for he would be far from supposing that it had its origin in the guinea-pigs, all of them in good health. How many mysteries in the history of contagions will one day be solved as simply as this!!!"

How prophetic was Pasteur in this last sentence and how well he depicts the modern scientific conception of disease carriers.

For the following anecdote I am indebted to my friend Dr. A. M. Forster.

"Doctor do you mean to tell me that this here consumption is catching?" "Yes, sir, that is the modern opinion." "Then how is it doctor that I never caught it from my wives? I have buried three wives with consumption and look at me." On further questioning it was found that this man now in his seventies, had served in the army but just before joining had had pulmonary hemorhages. The open air army life no doubt had changed him from a man with incipient active disease to one with chronic, as he acknowledged he had yet troublesome coughs in winter.

Here indeed was an innocent yet veritable tuberculosis Bluebeard, and the following sad story illustrates a type of many instances with which all physicians investigating tuberculosis are familiar.

Almost half a century ago a plump robust young girl married a man hollow cheeked, thin and delicate, with an annoying cough, and accustomed to blood spitting and hemorhages. This man became in time hale and hearty and a splendid specimen of old age. The wife became an active energetic old lady in spite of an ailment which all her

physicians for forty years had recognized as a chronic bronchitis! Two children were born to this wedlock. One died of consumption in her third decade, the other died of galloping consumption at the age of twenty.

Repeated sputa examinations seemed to corroborate the conviction that the mother had only bronchitis, until one day millions of tubercle bacilli were disclosed.

The questions of typhoid, diphtheria, or epidemic meningitis carriers have been capable of quick solution. The development of tuberculosis however even from repeated infections can be so slow, that analogous reasoning must be accepted for possible proof in most instances.

It is more than probable therefore that in the family mentioned above the husband infected the wife and she in turn was the source of the fatal illness in her two children.

Scientific investigations seem to indicate that in tuberculosis repeated infection is the usual rule, and how can this better result than from constant contact in family life?

In a discussion before the British Royal Society of Medicine two years ago Dr. Squire stated "There may also be comparatively healthy individuals who distribute the disease, just as in diphtheria and typhoid. Bronchitic subjects may become tuberculous without any change in their symptoms beyond the existence of tubercle bacilli in their sputum.

Cases of arrested phthisis often continue to cough up tubercle bacilli although otherwise in good health. Probably at least ten per cent of those living in contact with cases of consumption themselves develop the disease."

In literature we frequently find reference to those who have triumphed apparently over tuberculosis and Dr. G. B. Gilbert has called my attention to the following in the Yale Alumni Weekly Jan. 5, 1912. It should serve as encouragement to many:

Whether or not the nonogenarian became a chronic carrier we cannot surmise; the fact that the wife survived sixty-three years of married life would not necessarily negative such possibility however.

"More than three score years ago three brothers, in good health, were daily looking and expecting to see me sink into the grave. I was struggling with a violent cough and disordered lungs. But, I remain a monument of mercy, 'A wonder to many! A wonder to myself!' In my 90th year—63rd year of wedded life. Read, and write, more, than in any former time without the aid of glasses. I am the only survivor of my father's numerous family. Mrs. M. is the only one living of her father's family, and is closing her 85th year.

"My connection with (Yale) college was in 1775."

Dr. Edwards writing in the Practitioner quotes from an old Medical Journal "The ravages of consumption during 1815 are indicated in the 'Observations on Prevailing Diseases' where a case is quoted of a lady who had just buried her last two children, eleven others and her husband having within a few years fallen victims to this fatal disease."

It is hardly far fetched in view of our present knowledge to presume that this poor lady too may have been a tuberculosis carrier.

It is questionable if at any time the germ of tuberculosis designs to kill its victim. The bacillus is a parasite of vegetable origin and can be compared in many respects with that parasitic shrub the mistletoe.

Near me as I write are coniferous woods, on many of the trees is the pine tree mistletoe, and what a striking parallel to the tubercle bacillus and the human race!

Many trees are dead, others withering away as a result of the parasitic growth. Others again which may be designated "mistletoe carriers" are magnificent specimens of the forest, not in the least handicapped by the small amount of mistletoe they support, yet acting as host from which this parasite can send forth its seeds to other trees. The aim and object of all parasites is the perpetuation of their species. They must not only have access to their victims but also egress. The ideal situation they can create therefore from their point of view is the "carrier," a host which cannot destroy them, but from which they can escape to other victims. Should all victims of tuberculosis die with the parasite within them there would be no more tuberculosis.

Whilst working out a possible method of vaccination against tuberculosis we have found that only twenty bacilli are necessary to infect a guinea pig, and one thousand will infect a calf. Children probably become infected with a few hundred. What chance then have they if exposed to an unrecognized "tuberculosis carrier" who can expectorate millions a day?

It cannot be denied that one result of the modern crusade against consumption has been to create an increased number of tuberculosis carriers, and so from the microbes' viewpoint the campaign has been somewhat pro-tuberculosis. Keeping in mind the tactics of the tubercle bacillus for its self-preservation, it therefore behooves us to insist on the strictest precautions always being followed by the tuberculous patient whose disease has only been arrested.

These cases must now regard themselves, and so should all people with chronic coughs, as comparable with the guinea pigs in Pasteur's experiments with chicken cholera. They are in apparent good health, yet their expectoration carelessly disposed of can sow contagion and decimate their families and friends. They must be taught to know "what fruit would spring from such a seed" and so be spared the thorns which they and we otherwise must reap.

A SANATORIUM FOR INDIAN CHILDREN

BY JOHN N. ALLEY, M. D.,

PHYSICIAN IN CHARGE, NATIONAL SANATORIUM FOR INDIANS, FORT LAPWAI, IDAHO

The Fort Lapwai Boarding School Plant at Fort Lapwai, Idaho, was remodelled during the past year, and is now used as a National Tuberculosis Sanatorium for Indian children. It has capacity of 100 beds.

Though the repairs were not completed until the year was well advanced, and the Sanatorium hardly ready to receive patients from a distance until last February, yet the enrollment has reached our full capacity. Twenty tribes and twenty-four states have been represented. In review, one of the very satisfactory conditions has been that fifty-two Nez Perces Indian children were treated during the past year, demonstrating that the institution is fully appreciated at home. About forty-eight children of other tribes from all over the United States were admitted.

The Nez Perces Indians are badly afflicted with tuberculosis; and, unless something be done to arrest the ravages of the disease, it will not be many years before this tribe becomes extinct. It is not unusual to visit families where ten or twelve children have been born to the parents, and all have passed away. In fact, the Nez Perces have decreased from 1800 to 1300 during the past ten years. Sixty per cent. of all their school children are afflicted with, and ninety per cent. of all their deaths are due to, tuberculosis.

The Sanatorium, during the past year, has discharged ten per cent. of the patients as cured. Seventy per cent. have made marked improvement, and are well on the road to recovery. The work has been an agreeable surprise, and serves to strengthen the belief that sanatorium treatment can accomplish much toward the recovery of incipient cases of tuberculosis. One per cent. of our patients have died, the death being due to abdominal tuberculosis, hopeless when admitted. Not all of our children are in the incipient stage upon entering the sanatorium. Two patients were admitted in rather advanced stage of tuberculosis, and they have made a definite and very satisfactory improvement. On the whole, the Fort Lapwai Sanatorium has done excellent work during this first year, and its future outlook is very bright.

In treating our tuberculous children we have tried to apply the principles of an abundant and nutritious diet, rest, and fresh air, supplemented with drugs, when indicated, and tuberculin in selected cases; and every known agent at hand to improve the physical condition. Each individual—so far as possible—is considered in preparation of the meals; the appetite is tempted; and food served attractively. A report of each meal is required, especially mentioning patients eating little. Weights are carefully recorded bi-weekly. Causes of poor appetites, and loss of, or stationary weight, are corrected, if possible. Any patient with temperature above 99° F. is kept at rest out of doors. All wards are on out-of-door porches, and are well screened. The patients are kept in the open air as much of the twenty-four hours as possible.

In the treatment of tuberculosis too much stress cannot be placed upon rest, for it is one of the cardinal remedies Some very good results have been obtained by the use of tuberculin in glandular and skin tuberculosis.

School room instruction and industrial training are given each child as is compatible with the physical condition and the establishment of final recovery. A considerable number of the children do good work in the academic department. The heavier manual work is done by an employed orderly, the industrial training of patients amounting only to the necessary physical exercise, as an adjunct to the acquirement of good health.

The organization established during the year enables us at all times to regulate and control our patients, and every hour of the day is carefully planned for each individual. Fatigue and special physical conditions are immediately reported to the central Sanatorium Office, where they are at once investigated and corrected.

Though the work of the year has been very good, with an enlarged and improved equipment, that of the future should be much better; and the Fort Lapwai Sanatorium should prove a great blessing to Indian children suffering from incipient tuberculosis.

Journal of the Outdoor Life

OFFICIAL ORGAN OF THE NATIONAL ASSOCIATION FOR THE STUDY AND PREVENTION OF TUBERCULOSIS; THE NEW HAVEN COUNTY ANTI-TUBERCULOSIS ASSOCIATION.

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The Aim of this Journal is to be helpful to persons seeking health by an outdoor life, and particularly to disseminate reliable information looking to the prevention and cure of tuberculosis. It is entirely philanthropic, and is in no sense a money-making enterprise. It should be distinctly understood, however, that the JOURNAL OF THE OUTDOOR LIFE is not intended to supplant personal medical advice. Anyone suffering from pulmonary trouble who is not under the care and guidance of a physician is taking grave chances.

THE CRISIS

Few patients with tuberculosis can look back to the time when they first learned of their disease, without sensations of keen distress or even horror.

To many this period has become associated with bitter regrets for mistakes that were made or opportunities neglected. To others comes the recollection of personal fault in vital truths imperfectly realized or in a frame of mind entirely out of accord with the demands of the situation now better understood.

Almost all who can now look back with equanimity upon that period of stress, see in it a crisis in their lives upon the outcome of which depended much of their future health and happiness. Such retrospects are valuable chiefly as they bring home lessons for the present, and happy are they in whom that lesson is one of thankfulness. The past cannot be changed, mistakes cannot be entirely wiped out and the present task must be accepted with whatever burden the past may have placed upon it.

But what of those who, because of this scourge still unconquered, are still each day brought face to face with their crisis? They are being tried as with fire. What will be the outcome? This is our most compelling present interest.

We can recognize certain self-evident factors necessary for their success, such as an early diagnosis, a good institution, temperate habits of life, skillful medical guidance, comfortable financial circumstances and devoted relatives or friends.

But the real key to the situation does not lie in any of these things, but in quite another direction, in the patient himself. Upon his attitude of mind, upon his

point of view depend more than upon all the other factors combined.

From the shock of the hateful knowledge of his disease, from the whirl of conflicting emotions, be it the sickness of despair or the bitterness of resentment, he must emerge a reconstructed being, equipped for a new purpose in life—*to get well.* With a patience and persistence in little things to be done each day for many, many days; with a courage not of ignorance but of determination to do what many another has been able to do before him; with an acceptance of a life apart for a while, in which ordinary pursuits and pleasures are considered no longer a natural right, but rather an occasional privilege; with a philosophy which can accept the outcome of the future, because of a faith in the ultimate good of all things and in a guiding Providence, by whatever name He may be called, he advances toward his goal.

Such a philosophy and such a faith would make it possible to join in the prayer of Robert Louis Stevenson, which has especial significance because written upon the day before his death and at the end of a life which was a long and finally successful struggle with tuberculosis.

"The day returns and brings us the petty sound of irritating concerns and duties. Help us to play the man, help us to perform them with laughter and kind faces, let cheerfulness abound with industry. . . . Grant us courage to endure lesser ills unshaken, and to accept death, loss and disappointment as it were straws upon the tide of life. . . . When the day returns, return to us our Son and comforter, and call us up with morning faces and with morning hearts—eager to labour—eager to be happy, if happiness shall be our portion—and, if the day be marked for sorrow, strong to endure it."

SIX REASONS AGAINST CARELESS EXPECTORATION

BY JOSEPH WALSH, M. D. PHILADELPHIA

First. There is the danger most generally talked of in connection with expectoration, namely, tuberculosis. It will be acknowledged at once that any person who knows he has tuberculosis of the lungs should not expectorate carelessly. Tuberculosis, however, is a very insidious disease, that is, it develops slowly, and even unconsciously, so that even when no symptoms exist, the disease may still be present. Consequently since it is impossible to be sure that we have not tuberculosis in its early developmental stage, none of us should expectorate carelessly.

Second. Tuberculosis is not the only disease which may be transferred by careless expectoration. We know now that colds are mild infectious diseases produced by microorganisms, and are, therefore, contagious. These colds simulate the other acute infectious diseases and are, therefore, much more contagious than tuberculosis. The common way such colds are transferred is by means of the handkerchief contaminated with expectoration or nasal secretion. A man has a cold and is using his handkerchief freely thereby contaminating his hands. He meets another and shakes hands with him, thereby transferring millions of germs to the other's hand; if the other now uses his handkerchief he transfers these germs directly to his nose. This is not an aesthetic thought, but it is the common way that colds are transferred.

It was at one time thought that colds were spread through the air and that influenza, for instance, was carried from Russia, where it is endemic, to the United States by the wind. We know now that this is not true, and that it is carried not by the wind but by people travelling between the countries. Years ago when travel was slow and the number of travellers small, it required many weeks after the outbreak of influenza in Russia before it reached the United States; now with travel rapid and the number of travellers large, it is only a matter of days after the outbreak in Russia before it is disseminated over practically the entire world.

Third. Even if we could be certain we had no tuberculosis and likewise certain that we had not an acute cold, it is still dangerous to expectorate carelessly. For though a small amount of secretion in the throat is normal, sufficient to make expectoration is abnormal and hence everyone who must expectorate must have some disease to produce it. The common diseases are chronic inflammations, called chronic rhinitis, pharyngitis or laryngitis or popularly, catarrh. These chronic inflammatory conditions of the nose and throat are undoubtedly slightly contagious and this is probably the reason why practically everybody is afflicted with them. Any individual, therefore, who must expectorate should be labelled at once as having some diseased condition of the nose, throat or lungs, and if he spits carelessly, it is not advisable to associate with him.

Fourth. If we could be certain that we had no tuberculosis and had no acute or chronic disease of the nose or throat, we still should not expectorate carelessly on account of the bad example. While uneducated and uncultured people see educated and especially educated people in high official or intellectual positions expectorating carelessly, it is impossible to teach them the danger. When a man appearing like an educated gentleman spits on the floor of a street car he encourages every man in the car to do likewise, and no-one knows when the example thus given will be the means of making a dangerous individual careless, a dangerous individual who may later be destined to come in contact with us or our children.

Fifth. Many of our States now have laws against careless expectoration, making it a misdemeanor punishable by fine or imprisonment or both; a man who is not careful, therefore, runs the danger of putting himself in a humiliating predicament as well as losing both time and money, and though arrests are not frequent, one is never certain that he may not be the next victim.

Sixth. There is also the bright side to thiss discussion, namely, since tuberculosis is propagated practically entirely through careless spitting, if everyone in the world, regardless of whether or not he had tuberculosis, was from this moment careful with his expectoration, no new cases of tuberculosis could develop and tuberculosis would necessarily be eradicated with those who have it now.

A TUBERCULOSIS QUESTION BOX

Suitable questions will be answered on this page each month. No treatment will be prescribed nor medical advice given for specific cases. Such advice can be given intelligently only by the patient's own physician. Address all communications to "Question Box Editor," JOURNAL OF THE OUTDOOR LIFE, 289 Fourth Avenue, New York City. Please write only on one side of paper. Questions received before the 10th of the month will be answered the following month.

TO THE EDITOR.—Doubtless there has appeared at some time in the JOURNAL all the usages of the adjectives used in describing conditions of tuberculosis, but there seems to be, at least in this city, considerable confusion as to this usage, and if you had a definite statement to which we could refer, it would be helpful.

A. J. S., Chicago.

The confusion is almost invariably connected with the use of the words *tuberculous* and *tubercular*. Recognizing this fact, The National Association for the Study and Prevention of Tuberculosis, at its annual meeting in May, 1906, adopted the following resolution—"Resolved: that in the interests of clearness and uniformity of nomenclature the Association employ in its official publications the term *tuberculous* to refer to lesions or conditions caused by the tubercle bacillus and the term *tubercular* to describe conditions resembling tubercules but not caused by the tubercle bacillus." This usage has been fairly generally adopted in this country and may be regarded as authoritative. It will be seen at once that occasion for the use of *tubercular* will seldom arise except in extremely technical discussions and that *tuberculous* will be the proper adjective in nearly every instance.

TO THE EDITOR.—Please tell me if you know which of the three States, Georgia, North Carolina or South Carolina is considered best for people to live in who have catarrh, bronchial or lung trouble. also what part in each State named is considered healthiest. Where can I get true information if you cannot tell me. Is it considered more healthy for a consumptive to live in a mild climate or in a more bracing climate like North Carolina?

Mrs. C. O. LeC., Eminence, Ky.

Certain sections of all three States you mention are suitable. They would be the higher and more inland regions away from the dampness of the sea coast. North Carolina would probably be preferable.

In regard to climate for consumptives, it is generally believed that the colder and more bracing ones are better excepting for older people or those in which there is a very marked nervous predisposition.

TO THE EDITOR.—I would like to know through the columns of your valuable journal, why a person's temperature does not register correctly immediately after exercise. For instance, if I take my temperature before rising in the morning and again after dressing, I find that it has dropped more or less during the interval, while if I rest fifteen or twenty minutes after dressing and then take my temperature a third time, it registers about the same as when taken at first. I also notice somewhat similar effects produced by my daily walk, viz.: that my temperature is as low or lower immediately after walking as before, and if there is an elevation, it does not show by the thermometer until about a quarter of an hour or more after exercising.

I shall appreciate it very much if you will explain these conditions for me. Yours truly, Patient, Gravenhurst, Can.

Reaction from exercise as shown by a rise of temperature is often not shown at its height until 15 to 30 minutes afterward.

This varies considerably with the individual but especially with the amount and violence of the exercise. In your case the exercise is very mild and the full effect upon your temperature might very well not be developed for 15 minutes. Why there should be a lower temperature immediately after exercise is more obscure, but this would undoubtedly not be the case if your exercise was greater. In any event it is probably of no clinical significance.

TO THE EDITOR.—We are required at the sanatorium to take our temperature four times a day, viz., at seven, twelve, four and seven o'clock, at which hours my thermometer registers about 97 3-5°, 98° 98 1-5° and from 98 4-5° to 99 2-5° respectively. I finish my supper about 6:15, and it appears to me that the high register of temperature at 7 P. M. is due more to the effects of the evening meal than to active tubercular trouble, as I find by experiment that my temperature is also high shortly after dinner. I also find that at 8 P. M. temperature has dropped usually a whole degree, and even several points by 7:30.

I would like to have your opinion as to cause of my evening temperature, and even if it be due to active trouble, do you think I should take exercise. I might say that at present I am walking fifteen minutes every morning, my weight is good and I'm feeling well.

Thanking you in anticipation of a reply in your September number, I am, Yours very truly,

J. D. McL., Muskoka, Ont.

Slight temperature reaction after a hearty meal is a normal phenomenon in healthy persons.

In tuberculosis the temperature is more easily affected and the reaction is consequently often exaggerated. In your case the temperature you mention might very well be due to the influence of digestion.

The question of exercise would depend more upon the effect shown after such exertion. If you have no reaction after your present exercise and feel well otherwise, it is undoubtedly doing you no harm and might be gradually increased under proper supervision.

Surrounded as you are by ideal conditions for supervision, we can only urge you to follow implicitly the advice given you by the sanatorium physicians who are in a position to judge of your case from every point of view.

NOTES AND NEWS

Outdoor Moving Picture Exhibition

The Committee on the Prevention of Tuberculosis of the Charity Organization Society of New York, in co-operation with the Health Department, gave open-air moving picture shows in the metropolitan parks this summer with great success. The twenty-two exhibitions held in the parks and recreation piers of Manhattan and the Bronx were attended by over 105,000 people.

The films shown were "The Red Cross Seal," "The Awakening of John Bond," "The Man Who Learned" and "The Visiting Nurse." Besides this, about 80 lantern slides were used. While the pictures were being shown, boys went through the crowd distributing the Committee's pamphlet "How to Avoid Consumption." In this way, 62,300 of these circulars found their way into tenement homes.

The tremendous popularity of the motion picture makes it an ideal method of popular education. The health films which were used have considerable dramatic interest, so it is not hard to keep the attention of the audience. In 1911, lectures, illustrated by lantern slides, were given in the parks, but the attendance this year at the moving picture exhibitions was over three times as large. So pleased is the Committee with the result of this summer's campaign that it is planning further use of the motion picture in tuberculosis work in New York.

Open-Air Schools' Rapid Growth

With the opening of the fall school term, over 200 open-air schools and fresh-air classes for tuberculous and anaemic children, and also for all children in certain rooms and grades, will be in operation in various parts of the United States, according to a statement by The National Association for the Study and Prevention of Tuberculosis.

All of these schools, the association says, have been established since January, 1907, when the first institution of this character was opened in Providence, R. I. On January 1, 1910, there were only 13 open-air schools in this country and a year later the number had increased only to 29. Thus, the real growth in this movement has been with the last two years.

Massachusetts now leads the states with 86 fresh-air schools and classes for tuberculous, anaemic and other school children, Boston alone having over eighty. New York comes next with 29, and Ohio is third with 21. Open-air schools have now been established in nearly 50 cities in 19 different states.

Based on figures of population and mortality furnished by the United States Bureau of the Census, it is estimated that not less than 100,000 children now in school in the United States will die of tuberculosis before they are eighteen years of age, or that about 7,000 of these children die annually from this one disease. Estimating that on an average each child who dies from tuberculosis has had six years of schooling, the aggregate loss to this country in wasted education each year amounts to well over $1,000,000.

This loss and much of the incident suffering could be materially decreased if open-air schools or classes for these children and those who are sickly and anaemic were provided. The National Association estimates that there should be one such school for every 25,000 population, especially in cities.

Starmont Sanatorium Closes

After more than seven years of successful work, the Starmont Sanatorium, located at Washington Grove, Md., on the outskirts of Washington, D. C., has been obliged to close largely because of lack of funds. In a recent announcement to the stockholders of the Washington Sanatorium Co. and the friends of the sanatorium, General Geo. M. Sternberg, who was president of the company and the organizer of the movement for the establishment of the sanatorium, says concerning the reason for the closing of the institution:

"It was largely from the point of view of preventing the extension of tuberculosis in the District of Columbia that I undertook the establishment of a tuberculosis sanatorium in 1905. At that time there was no sanatorium for such cases in this vicinity. But since Starmont Sanatorium was established we have a well-equipped tuberculosis hospital, built and supported by congressional appropriations, and the states of Maryland and Virginia, from which we at first received a number of patients, have established sana-

toria to which their citizens are admitted free or at rates far below the cost of maintenance. There has also been a notable and gratifying reduction in the number of cases of tuberculosis in the District of Columbia during the past few years."

The property upon which the sanatorium has been located has already been sold and arrangements have been made for the disposal of the buildings and for the dissolution of the stock company.

EIGHT THOUSAND PEOPLE AT A MOTION PICTURE EXHIBITION IN HAMILTON FISH PARK, NEW YORK

An Outdoor Sleeper's Society

An Outdoor Sleeper's Society has been organized at Grand Rapids (Mich.) under the direct auspices of the local anti-tuberculosis association. The membership of the society does not consist exclusively of consumptives, but largely of persons in good health whose aim and object is to retain their health by securing plenty of fresh air at all times. The objects of the society as expressed in the constitution are as follows:

"To exchange individual experience for mutual benefit among members.

"To disseminate useful information to novices and the general public, and to otherwise advocate outdoor sleeping toward longer life, better health and attendant happiness.

"The membership is divided into three classes:

"Novice class, those who have slept out of doors for one year or less.

"Graduate class, those who have slept out of doors from one to five years.

"Veteran class, those who have slept out of doors more than five years."

Among the members of the Society are leading bankers and business men of Grand Rapids. The local anti-tuberculosis association is planning to feature this movement for outdoor sleeping in its fall and winter campaign. This is the second organization of this character formed in the United States, the first one being organized some time ago in Chicago.

Against Patent Medicine Reading Notices

One of the regulations adopted by the Post Office Department under the new Postal

Law passed by the last Congress, is of vital significance to anti-tuberculosis workers, in that it should have the effect of indicating to the unsophisticated whether certain articles which they are reading concerning alleged cures for tuberculosis are paid advertisements or simply plain reading matter. The regulation requires:

"That all editorial or other reading matter published in any such newspaper, magazine, or periodical for the publication of which money or other valuable consideration is paid, accepted, or promised, shall be plainly marked 'advertisement.' Any editor or publisher printing editorial or other reading matter for which compensation is paid, accepted, or promised, without so marking the same, shall, upon conviction in any court having jurisdiction, be fined not less than fifty dollars ($50) nor more than five hundred dollars ($500)."

Physical Defects of School Children

"Of the 20,000,000 children in this country not less than 75 per cent. need attention for physical defects which are prejudicial to health and which are partially or completely remediable." This is the result of the findings of Dr. Thomas Wood, Professor of Physical Education in Teachers' College, Columbia University, and published for free distribution by the United States Bureau of Education. Dr. Wood estimates that at least 15,000,000 school children now in attendance in the schools of the United States need a doctor's attention and that of this number 1,000,000 have or have had tuberculosis. Several million of the children have two or more defects of body. Among the principal defects enumerated by Dr. Wood are the following:

From one to two per cent. or 400,000 have organic heart disease; probably five per cent. or 1,000,000 have tuberculosis of the lungs; about five per cent. or 1,000,000 have defective hearing; about twenty-five per cent. or 5,000,000 have defective vision; about twenty-five per cent. or 5,000,000 are suffering from malnutrition; about thirty per cent. or 6,000,000 have enlarged tonsils, adenoids or enlarged cervical glands; and about fifty per cent. or 10,000,000 have defective teeth which are interfering with health.

Bull Moose for County Hospitals

The Progressive Party Platform in New York State urges definitely the provision of county hospitals in every county in the state. The section on this and kindred subjects is well worth quoting. It is as follows:

"We favor a vigorous development of state and local activity in the protection of the public health. The State Health Department should have ampler resources and should maintain closer relations with local health authorities. The number of local health authorities should be diminished and their remuneration and responsibilities increased. Preventable disease should be prevented.

"Facilities for the care of curable disease should be provided. Tuberculosis can and must be eliminated. To this end the state should provide more sanatoria, and in every county tuberculosis hospitals should be established. Careless consumptives must be detained in hospitals by law.

"There should be expert medical inspection of all school children and facilities afforded for the prompt and economical correction of all removable defects which will interfere with future usefulness. All provisions for public health and sanitation should be absolutely separated from agencies for poor relief."

Ohio Provides Registration

Through the efforts of the Ohio Society for the Prevention of Tuberculosis, the State Board of Health at a recent meeting put in force a regulation requiring that tuberculosis be reported hereafter. This disease was included in the list of other infectious diseases made reportable by the State Board of Health. A fine not to exceed $100 for first offense and fine and imprisonment not to exceed ninety days are the penalties provided by the legislation. Local registration is also provided by ordinances in the cities of Cleveland, Cincinnati, Columbus, Dayton, Youngstown, Canton and Springfield.

Ohio makes the thirty-eighth state in the Union which has provided for registration of tuberculosis cases either by active legislation or by legislation of the state board of health.

Plans for Prevention in Northwestern University

The program for the use of the $250,000 fund given to the Northwestern University two years ago by James A. Patten, has been announced. Under the plan Dr. Arthur I. Kendall, instructor in preventive medicine and hygiene at Harvard Medical School, has been put in charge of the work of the new department as professor of bacteriology. He will be assisted by the holders of four fellowships to which the fund gives $600 a year each.

The Patten gift was made specifically to advance scientific investigation of the causes of disease and the methods of prevention, the donor expressing a desire that particular attention should be paid to the methods for preventing tuberculosis. The further plans for the work of the new department have not been announced.

Another $500,000 Sanatorium for Pennsylvania

The contract for the new Pennsylvania State Sanatorium to be erected at Hamburg in Berks County, near Reading, has been awarded to a Buffalo firm for $510,629. The contract calls for the completion of the institution within 450 working days. The build-

ings are to be constructed of hollow tile, stucco finish, somewhat of the style of the new sanatorium recently erected at Crescent. The architecture will be of Spanish Mission style. This will be the third State Sanatorium to be operated under the State Department of Health of Pennsylvania.

County Hospitals in Minnesota

Thus far in the year 1912, four counties in Minnesota have taken advantage of the County Hospital Law passed in 1909 to provide special tuberculosis hospitals. These are Itasca, Lake, Marshall and Ramsey. Three other counties have established hospitals under this law, namely, St. Louis, 1909, Wabash, 1910, Ottertail in 1911. The Minnesota Association for the Prevention and Relief of Tuberculosis is working vigorously for the further extension of hospitals of this character.

Tuberculosis in New York State Prisons

One of the exhibits shown at the New York State Fair was on the subject of tuberculosis in the New York State Prisons. According to the records displayed in the exhibits, from 1890 to 1904 in the three State Prisons there were 304 deaths from tuberculosis. Not until 1901 was anything in the way of systematic work begun in the prevention of tuberculosis, and in that year a special ward accommodating 43 patients was built at Clinton Prison. From 1904 to 1912, 1,293 patients have been treated at this sanatorium with the following results: Apparently cured, 197 or 19.8 per cent.; arrested, 275 or 27.68 per cent.; improved, 400 or 40.21; unimproved, 50 or 5.03; died, 64 or 6.33, and died from other causes, 9 or .95 per cent.

Negro Sanatorium in South Carolina

A movement for a negro tuberculosis hospital has been started in South Carolina under the direction of the Colored Anti-Tuberculosis League, headed by citizens from Charleston. The committee in charge of the movement plans to raise $5,000. It is planned to build a small sanatorium near the city of Charleston and to expand the work as funds are received.

This sanatorium, together with the one for which money is being raised near Wilson, N. C., editorial comment on which was made in the JOURNAL last month, mark a unique advance in the campaign against tuberculosis in the South.

Michigan Workers' Conference

At a recent conference held under the auspices of the Michigan Association for the Prevention and Relief of Tuberculosis at Lansing, plans for anti-tuberculosis work throughout the state were carefully discussed. Among the subjects brought up were the Red Cross Christmas Seal sale with plans for the work; the question of trained nurses in social service work for tuberculosis; and the relative merits of the monthly bulletins as against the large annual report of the association. Concerning the latter point, the sentiment of the meeting was that if it became necessary to give up either one of these publications, the bulletin should be retained.

Boston Death Rate Declines

In the eight years during which the Boston Association for the Relief and Control of Tuberculosis has been in existence, the death rate from this disease in Boston has fallen from 21.10 to 15.47 per 10,000 population according to a recent statement of the Association. In 1903 when the Association was started, the only beds for consumptives were 79 at the Almshouse. In 1911 the number has been increased to 390. The percentage of total deaths caused by consumption has also fallen from 11.5 to 9.07.

Bruchesi Institute

The Bruchesi Institute for the Treatment of Tuberculosis in Montreal has recently opened a new building containing 4,850 square feet of floor space. The building is well equipped for the work of the Institute and will house the dispensary and also make provision for nurses' quarters and for temporary detention of patients awaiting examination.

The Bruchesi Institute operates largely among the French Catholics of Montreal. This dispensary and the Montreal Tuberculosis Institute are the only dispensaries for tuberculosis in this city. Recently the provincial government granted $3,000 for the use of the dispensary.

Moose Will Build Sanatorium

By unanimous vote The National Convention of the Loyal Order of Moose, recently held at Kansas City, adopted a resolution levying a tax of $1.00 per capita on all members in good standing for the erection of a national sanatorium for tuberculous members of the order. The selection of a site and the erection of the sanatorium was left with the Supreme Council. Hot Springs, Arkansas, and Phoenix, Arizona, have been considered as possible location of the institution. The order plans to spend not less than $150,000 on the institution. This will be the fourth sanatorium in the United States conducted exclusively by fraternal orders, the others being the Woodmen Sanatorium at Woodmen, Colo., the Royal League Sanatorium at Black Rock, N. C., and the Independent Order of Foresters Sanatorium at Rainbow Lake, N. Y.

A Town for Consumptives

Announcement has recently been made in Texas papers concerning a plan of a stock company headed by men from San Antonio,

for the establishment of a city for consumptives in La Salle County, Texas. According to newspaper reports [illegible] acres of land have already been purchased and it is planned to erect a city for at least [illegible] consumptives with every modern convenience for medical supervision and for taking the treatment for tuberculosis.

City Takes Over Seattle Work

As the consummation of a plan which was put into operation about a year ago, the city of Seattle has now taken over all of the sanatorium and other work of the King County Anti-Tuberculosis League. This work includes a small sanatorium which has been conducted for some time by the League near the city, the Tuberculosis Clinic and the visiting nurse work. The League has formed a special fund [illegible] for the purpose of [illegible] of the visiting nurses of Seattle and this also will be taken over by the city. The [illegible] of these [illegible] will be [illegible] by the city and county. The Anti-Tuberculosis League has not yet decided whether it will continue its own work or not.

Sanitariums of Organized Labor

An organization of labor men and health officials was perfected at a recent meeting held in Chicago. It adopted the name of "Sanitariums of Organized Labor." Its object is to combat tuberculosis by fighting for the proper state and family sanitation. [illegible] of [illegible] Painters Union was elected president. A constitution was adopted. It was decided to make the campaign among [illegible]. Each of the [illegible] will [illegible] among their own employees. In order to be properly equipped for the task, the organization will take up the study of the State and city [illegible], the State laws relating to health and sanitation, and the regulations of the Health Department. The meetings will be held on the second and fourth Sundays of the month.

Southwestern Tuberculosis Commission

In accordance with a resolution adopted by the Southwestern Conference held in April at Dallas, Texas, the Governor of Texas and the governors of several of the Southwestern States are appointing a commission to [illegible] the work of the Conference. One of the [illegible] tasks which the commission will [illegible] will be to [illegible] Congress to [illegible] the [illegible] of the Southwest as sanatoria for tuberculosis patients.

A Voluntary Assessment Plan

At a recent meeting [illegible] Memphis [illegible] the work of the [illegible] tuberculosis association which [illegible] plan [illegible] was presented and adopted. The plan contemplates a weekly assessment of five cents on every working man and woman in Memphis. The method of collecting the money would be through the employer who would deduct from the pay envelope of each employee the amount specified each week. Efforts are now being made to get 5,000 working men and women in the city and vicinity to agree to a voluntary assessment of this character.

Tuberculosis Hospital in Bombay

The following statement from Consul Edwin A. Cunningham of Bombay, is of interest to anti-tuberculosis workers in this country: "There is no municipal tuberculosis hospital in Bombay, but it is gratifying that one of the prominent Parsees of this city has recently placed an annual fund of $5,000 for the suppression of this disease. This is to be continued for 15 years, and other private subscriptions will no doubt be forthcoming, inasmuch as there is now an active movement to battle against this disease. It is possible that the fund may be supplemented by the municipal government."

An Exhibit in London

The Tuberculosis Exhibition was opened on August [illegible] in London under the direction of the Society of Medical Officers of Health at their offices, No. 1 Upper Montague Street, Russell Square. The exhibition is one of the first to be held in London along this line. Efforts are being made to carry on a campaign in connection with the exhibition similar to those which are familiar to American cities.

Special attention is given in the exhibition to the building and arranging of sanatoria and dispensaries and institutions generally and to the various devices for nursing and also for [illegible] work. It is planned to keep the exhibition open for a period of twelve months and the different parts of the exhibition will be altered from time to time during that period.

Personals

E. G. Routzahn, for several years director of the American Tuberculosis Exhibition of the National Association for the Study and Prevention of Tuberculosis, has accepted a position with the newly organized Department of Surveys and Exhibits of the Russell Sage Foundation.

[illegible], formerly secretary of the [illegible] Anti-Tuberculosis Association, has taken charge of the Associated Charities of [illegible].

[illegible] has been appointed as [illegible] tuberculosis under the [illegible] Health Department.

[illegible] of Buffalo has been appointed [illegible] of the J. N. Adam Memorial [illegible], Buffalo's new tuberculosis sanatorium [illegible] at Perrysburg, N. Y.

Dr. Isaac W. Brewer, U. S. A., located at Fort Niagara, has been appointed superintendent of the Tompkins County (N. Y.) Hospital, located at Taughannock.

Dr. George William Beach, assistant superintendent of the Iowa State Sanatorium, has been appointed superintendent of the Minnesota State Sanatorium at Walker.

Dr. J. E. Brooks who has been superintendent for several years of the North Carolina State Tuberculosis Sanatorium at Montrose, has resigned and Dr. E. M. Street of Glendon (N. C.) has succeeded him.

Dr. Elijah E. Clovis of Hebron (W. Va.) has been appointed superintendent of the new State Tuberculosis Sanatorium about to be erected by West Virginia at Terra Alta.

Dr. Bascom Lynn has been appointed superintendent of the Texas State Sanatorium located at Carlsbad.

Jottings from the Hospital Field

The county commissioners of Harris County (Texas) have been asked by the Houston Anti-Tuberculosis League to appropriate $15,000 for a tuberculosis hospital, and it is probable that the appropriation will be granted.

The Department of Charities of New York City and the Department of Health announce that the Sea View Hospital being erected for 1,000 patients at Staten Island will be ready for use about January 1st.

A resolution has been adopted by some of the colored fraternal organizations of Missouri urging the next legislature to provide funds for the establishment of a negro tuberculosis sanatorium.

Work on the new county hospital for Morris County (N. J.) near Morristown, will be begun in the near future. The site has already been purchased.

Ground will be broken within the next month for the new $200,000 municipal hospital of Pittsburgh. It is planned to rush the building as rapidly as possible.

The erection of a tuberculosis sanatorium under the auspices of the St. Louis Society for the Relief and Control of Tuberculosis has been begun near that city.

St. Anthony's Hospital for Tuberculosis, being erected at Woodhaven on the outskirts of Brooklyn (N. Y.), is rapidly nearing completion and will provide hospital treatment for at least 300 advanced cases.

Fifteen thousand dollars has been appropriated by the County Council of St. Joseph County (Ind.) for the erection of a tuberculosis hospital near South Bend. This is the culmination of an organized movement which has been going on for over three years.

Work on the last ward of the new state tuberculosis hospital being erected near Norwich (Conn.) has been begun and is being pushed as rapidly as possible.

Sufficient money has now been raised from a tax levy at Rock Island (Ill.) for the erection of the hospital under a law of the state passed three years ago.

The Chicago Winfield Tuberculosis Sanatorium located at Winfield (Ill.) has recently received a gift of $25,000 from Mr. Julius Rosenwald of Chicago.

Construction work has been begun on the hospital for the treatment of children suffering from non-pulmonary tuberculosis being erected on the grounds of the State University at Galveston (Tex.).

Nearly $15,000 will be expended by the County Board of Supervisors of Oswego (N. Y.) on the erection of a new tuberculosis hospital.

A new administration and service building has recently been completed at the San Antonio Tent Colony which is in many respects a model of its kind for institutions of this character, being constructed especially with a view to provide the largest amount of outdoor sleeping arrangements possible.

The Chicago Fresh Air Hospital has recently opened a new building presented to the institution by James A. Patten and constructed at the cost of $120,000.

Provision has been made for the erection of a tuberculosis hospital near Springfield (Ill.). The hospital will probably be erected by the Springfield Anti-Tuberculosis Society.

With the completion of two new buildings being erected at Muskoka and Weston (Ont.) the National Sanatorium Association will have 600 beds in its four institutions.

A special children's pavilion and open-air school has been opened at the Iola Sanatorium, Rochester, N. Y.

Through an oversight, we neglected to state in the July number in a note about the Reception Hospital (Saranac Lake, N. Y.) that the nominal term of treatment at this institution is only two months and hence the average length of stay, 58.1 days, approximates very closely the expected term.

NOTES FROM THE FIELD

The Maine Anti-Tuberculosis Association has issued a very attractive pamphlet entitled "How We May Save a Million Dollars in the State of Maine Every Year." This pamphlet is well worth the study of other organizations.

According to dispatches from Berlin, the Grand Duchess of Hesse has induced the match manufacturers of that district to print the rules for the prevention of tuberculosis on all of the match boxes which they send out hereafter.

The Rhode Island Anti-Tuberculosis Association is emphasizing the danger of the spread of this disease of advanced cases by calling attention through the press to the fact that there are a certain number of such cases in a given district, for instance, 41 in different parts of the Pawtuxet Valley.

The City Board of Health of Atlanta has made tuberculosis a reportable disease, and will endeavor to enforce the law on this subject.

The Delaware Anti-Tuberculosis Society has received an appropriation of $1,000 from the City Council of Wilmington.

The August number of the Detroit Tuberculosis Bulletin contains a splendid cartoon copied from the Detroit *Journal* headed "If We Have No Open Air Schools." The cartoon is one of the strongest possible appeals on this subject.

The New York City Department of Health has ruled that all homeless cases of tuberculosis hereafter admitted to the Riverside Tuberculosis Hospital for Advanced Cases may be detained at the discretion of the officers of the hospital.

The proceedings of the Southwestern Conference on Tuberculosis have been published in a bulletin by the Texas Anti-Tuberculosis Association and the State Board of Health.

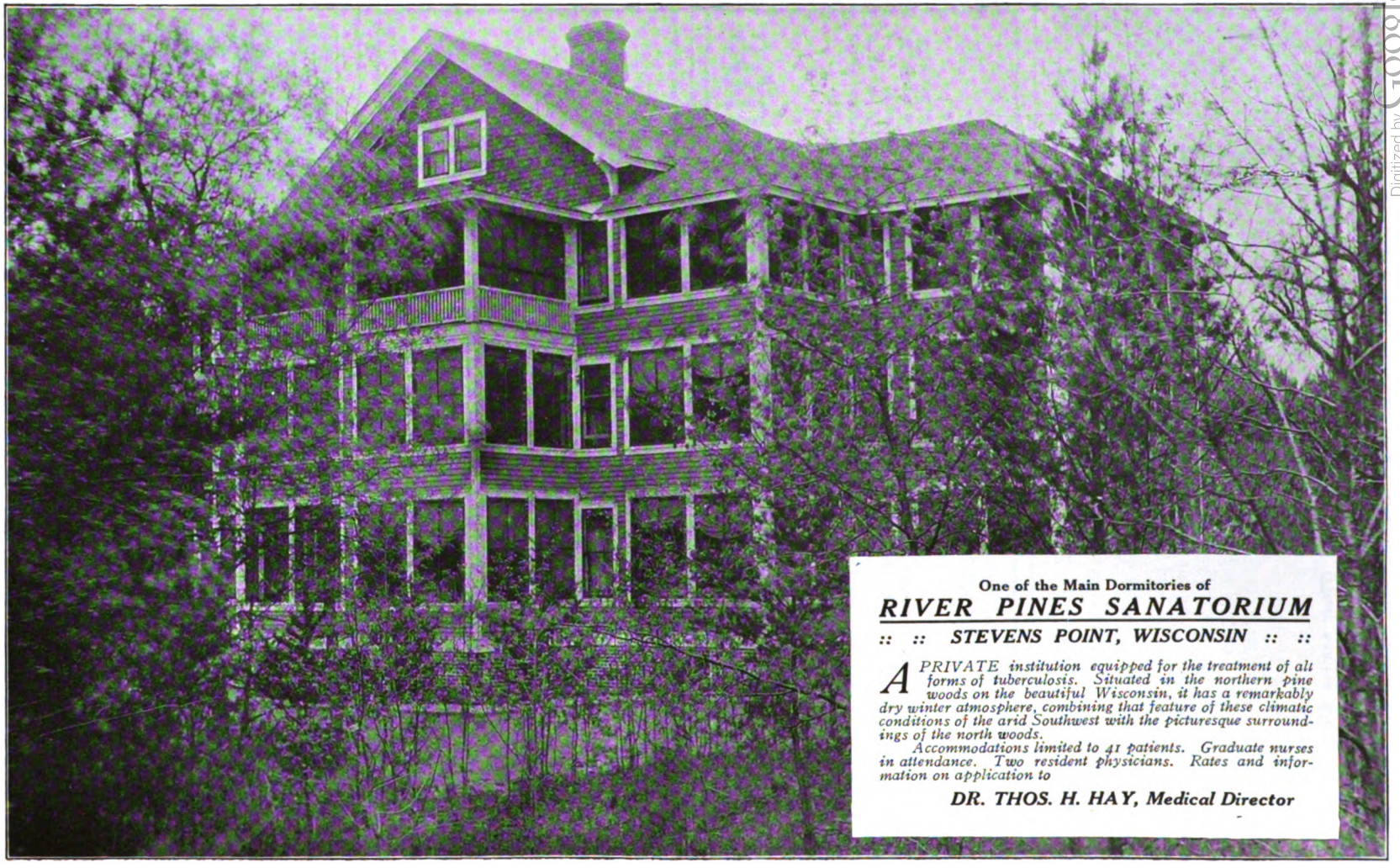
A number of interesting plans for state work were discussed and decided upon at the recent meeting of the Washington State Association for the Prevention and Relief of Tuberculosis in Tacoma.

The Grand Lodge of the Elks at its recent meeting in Portland (Ore.) appropriated $20,000 for the use of a special committee on tuberculosis.

"Health Education Week" held in Lafayette (Ind.) July 22-26 was a great success.

The proceeds of "Blue Star Tag Day" of the Detroit Anti-Tuberculosis Association will approximate $20,000.

About $2,500 was realized by the Louisville (Ky.) Anti-Tuberculosis Association from a recent canvass for funds called "Ten-Cent Day."



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New Mexico Cottage Sanatorium

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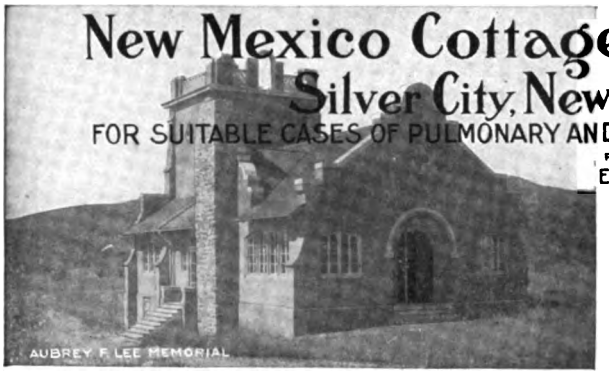
PHYSICIAN-IN-CHIEF E.S. BULLOCK, M.D.

MANAGER WAYNE MacV. WILSON



This building is used as a women's pavilion and for general amusement purposes

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VOL. IX DECEMBER, 1912 No. 12

JOURNAL OF THE OUTDOOR LIFE

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IN THE INTEREST OF THE ANTI-TUBERCULOSIS CAMPAIGN
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VOLUME IX DECEMBER, 1912 No. 12

Contents

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BINDERS of strong and durable construction for back numbers are supplied by us at 50 cents each. Twelve selected back numbers, constituting a valuable layman's library on the prevention and treatment of tuberculosis, in a binder, $1.50.

THE QUESTION BOX EDITOR will answer without charge suitable questions in regard to Tuberculosis, and will give information about sanatoria for the treatment of this disease. No treatment will be prescribed nor medical advice given for specific cases. Such advice can be given intelligently only by the patient's own physician. Address all communications to "Question Box Editor," JOURNAL OF THE OUTDOOR LIFE, 289 Fourth Avenu New York City.

ENTERED AS SECOND CLASS MATTER, March 30, 1910 at the post-office, at New York, N. Y., under the act of March 3, 1879.

TAKING THE CURE IN MOTION PICTURES

Vol. IX DECEMBER, 1912 No. 12

JOURNAL OF THE
OUTDOOR LIFE

PRELIMINARY TALK TO PATIENTS UNDERGOING TREATMENT FOR PULMONARY TUBERCULOSIS

DELIVERED AT THE ADIRONDACK COTTAGE SANITARIUM

BY LAWRASON BROWN, M. D., SARANAC LAKE, N. Y.

[While this talk is intended primarily for patients at the Adirondack Cottage Sanitarium, it contains much advice that is helpful to patients taking the treatment anywhere and for that reason it is deemed wise to publish it in this form. Patients taking treatment elsewhere should develop the same powers of self control, and they have only to change the words and the locations to have the subject matter of this little talk to apply to them.—THE EDITOR.]

I like to have a little talk with you when you first come so we will all know exactly what we are striving for—so you can understand the nature of the disease and what your problem is. It is no easy problem and a large percentage of the people do not solve it; they fail in the attempt.

The disease, tuberculosis, is the most widespread in the world; it occurs everywhere you might say that man lives, from the north polar regions to the equator and south to the South Pole. It is more prevalent, however, in certain regions than in others. All races are prone to it. Some of them, especially those that live out of doors, do not have it until they begin to live indoors. The American Indian, for instance, is more susceptible to it since he has begun to adopt the ways of civilization. The Arabs and Bedouins and some of the African tribes do not get it until they begin to live in houses and towns.

The disease is caused by a tiny, microscopic plant. It is called, as you know, the tubercle bacillus. It is not green, like the fern in the window, it is very much the color of the wall (buff) and it is shaped just like a lead pencil. It is so small that through the hole made by a pin in a sheet of paper, a thousand of these little germs could pass, side by side, without touching each other and without touching the sides of the hole. Consequently, on a particle of dust, such as we see floating in a ray of sunshine, many of these little germs can easily ride as in a chariot, and thus we may breathe them into our lungs.

A curious thing about this little plant is that it differs from most other plants in two very important particulars, which you ought to remember. All ordinary plants, geraniums for instance, need sunshine and fresh air. This plant, this tubercle bacillus, cannot live in sunshine and it cannot live in fresh air. Give it either all the fresh air that you can get (for instance, place it in a room with the windows open), or put it in the sunshine, and it will die. Sunshine will kill the tubercle bacillus, if not in a thick mass of sputum, in four or five hours at the most, and possibly in less time. Of course in a dark corner of the room, where direct sunlight never penetrates, an exposure for two or three days to the indirect sunlight may be required to kill it, but such light will kill it eventually. In other words, light is one of the best germicides, and it will surely kill these germs. If, on the other hand, you put the tubercle bacillus in a dark place but give it plenty of fresh air, it will also die. It cannot stand either air or light. Thus, in a well lighted and ventilated room, the tubercle bacillus is very speedily killed.

This leads me to say that tuberculosis is a house disease. I mean by this that it is practically never contracted out of doors; it is always contracted in the house. The tubercle bacillus cannot live out of doors any length of time and it practically never infects anybody out of doors. For instance,

if a person expectorates on the pavement out of doors and someone else walks in it and takes it into the house on his shoes, or brings it in on her skirts, it gets on the carpet and dries. The maid then comes along and sweeps it with a broom breaking it up into fine dust which settles on the window sills, furniture, etc. Now the tubercle germ has no power of locomotion. It can no more move from place to place than a geranium or a tree. It depends on outside agencies to get from one place to another. A further curious thing is, that as long as it is moist, it can never get into the air except when subjected to a violent blast of air, as we shall see later. The great object then is to keep this germ moist. For this reason, "moist" sweeping should always be employed; that is, moist leaves or moist sawdust should be sprinkled on the floor or a moist bag placed over the broom. This collects the dust so that it can be burnt and does not allow it to fall upon the furniture where the usual practice is to stir it up once more with a dry duster. This gives the germs one more chance. Here too "moist" methods should be employed and the duster moistened with oil for furniture, with water for paint. The duster should then be boiled. By far the best cleaning method is the vacuum system which I hope and believe will be, at some time, almost universally used.

Tuberculosis is almost always contracted by means of these particles of dust. We may breathe them in or they may be swallowed, but eventually they go to our lungs. They get into our bodies practically always by these routes. Usually they come from somebody else who has been careless with his sputum. All of you who are adults, have gotten this disease from somebody else who has been ignorant or careless. The chances are not one in ten thousand that you got it from milk or from food or, in fact, in any other way than from a person who has tuberculosis. If there is a tuberculous patient in the house and he or she is careless about the disposal of sputum, you can easily see how the infection comes about. If patients are careless about spitting on the streets of the cities, others can walk in it and track it into their houses.

Another method by which tuberculosis can be contracted is a way that a great many people do not realize. If a person coughs in front of a pane of glass or in front of a looking glass, you will find that the glass is covered with fine spray or droplets of sputum and if he coughs in his hand, it is immediately sprayed with these fine particles of sputum. These droplets may contain tubercle germs. They will carry for a distance of about four feet from a patient and may remain suspended in the air sometimes for as long as an hour. So it is easily seen that if a person, who is in a poorly ventilated room, coughs and moves about without covering his mouth, he could in time infect the whole room. He will be surrounded by a halo of these droplets, each of which may contain tubercle bacilli. People do not realize this. All you have to do to eliminate this danger is to hold a cloth in front of your mouth to catch the spray. The tubercle bacillus cannot get through the cloth and you are no source of danger to anybody else. You must cover your mouth when you cough.

Another lesson that you can draw from this fact is that if anybody else coughs without covering his mouth, do not go near him. You can catch pneumonia, grippe, bronchitis, colds and a number of other diseases of the respiratory tract by this means. It is a simple thing to cover one's mouth and it is not asking too much of people to request them to cover their mouths when they cough. Sometimes patients cannot cover their mouths in time; they cough occasionally when they do not know it is coming, but if a man does not make an honest, conscientious effort to cover his mouth when he coughs, he should be avoided and ostracized. The only proper way to take care of sputum is to burn it, and for that reason we do not wish anyone to expectorate into the bowls or sinks but always into sputum boxes which can be burned.

Adults may get tuberculosis from food but they very, very rarely contract it from milk. Children, on the other hand, do get it from milk. We have heard that the cattle germs (bovine tuberculosis germ) do not cause tuberculosis in man which, in a broad sense is true, but children are prone to the disease from this and other sources. It has been estimated that 200,000 persons die annually from tuberculosis in the United States and that 8% or 16,000 of these are children who die from the tuberculosis germ found in cattle. These facts are serious enough for us all to realize that cattle tuberculosis must be stamped out.

The question of heredity is one that concerns all of us more or less but tuberculosis in man, we may say, for practical, working purposes, is unknown as an hereditary disease. It occurs so rarely that we can disregard it, and when a child is born with the disease it quickly succumbs to it. What does happen, though, is that a predisposition to the disease may be inherited. The children of tuberculous parents may, in fact, have less resisting powers to all diseases. Consequently these children should be protected more carefully than other children. This simply means that rules such as these I have mentioned and others must be carried out. The house must be well lighted and ventilated also; the floors well cleaned; and care must be taken to see that the food supply is of good quality and adequate. A person cannot get the disease unless he gets the tubercle bacillus into his body.

There are two forms of tuberculosis, the one that you have, which is developed tuberculosis, which we call clinical tuberculosis;

and the other, a form that 75% of the people living for example in New York City have, non-clinical or undeveloped tuberculosis. They have the tubercle bacillus in their bodies, they might react to some of the tests for tuberculosis, but they will never know that they have tuberculosis if they take care of themselves. Just as you should take care of yourselves to keep from developing it, avoiding overwork, worry, disease, and a great many other things which will bring it on, so, when you get well, these same things will bring on fresh activity of the disease for you if you do not avoid them. These are vitally important things for you to know.

The cure of tuberculosis is the point in which you are now chiefly interested. Most people think they can go away for two or three months and get perfectly well. That is entirely wrong. You come here for five or six months, which is a very short time, and you simply get on the road to recovery. You have got to go home and finish it up by living carefully for three or four years. I am firmly convinced that tuberculosis is not cured for three or four years and the reason so many people die is because they do not realize that fact. They think that after two or three months because they feel better and look better and have gained a good deal of weight they can go home and return to their old ways of living, but they cannot do it and sooner or later, if they do return to the same life with its numerous and hard duties, they are going to relapse and the second attack is harder to treat than the first. For this reason, do not get the idea that tuberculosis is an easy thing to get rid of. Forty per cent of all patients treated here have died, and at least 90% of them from tuberculosis. I tell you these things because a great many people have the idea that the cure of tuberculosis is child's play, when really it is one of the most difficult problems that any of you has ever had to face. To get well from tuberculosis means that you must pay attention to every little detail. You must watch and make no mistakes, for these often prove fatal. Many small things may not seem essential to you, but they are, and recovery really depends upon paying attention to little details. A person who is careless and slack about details will be slack about great things. I believe it was unnecessary for many of these patients I have mentioned to have died, and it is for this reason that we are endeavoring to teach you the dangers that beset you here and hereafter so that you may plan wisely to avoid them.

Regarding the question of foods, I am not quite in accord with some other men. I do not believe that the main thing for a patient to do is to get to be such a mass of fat that he can hardly walk around, with little or no strength and loss of breath every time he walks uphill. I want my patients to gain up to their normal weight and go a little beyond, but I want them to gain proportionately in strength. An important thing to-day is to realize that over-eating is just as dangerous as under-eating, that the proper way is to eat as little as you can to maintain your strength. The less you can eat and continue to gain, the better. Put too much into your body and it will ferment and decompose and thus lower the body's resisting powers. Many patients suffering from tuberculosis are affected by over-eating. The medical profession in general has realized the importance of care, of good food, but not many physicians have given attention to the danger of over-eating, which only clogs the system and prevents the best results. Give an automobile too much gas and you choke the engine, or overstoke a steam engine and its efficiency is diminished. So, find out the best amount to eat to get the best work from your body. Large gains are not necessary. To eat as little as will enable you to hold your weight and strength, is the important thing.

I have come to believe that the general public knows how important good food is, realizes that fresh air is a necessity, but is still wholly at sea in regard to the danger and value of rest and exercise. Strychnine and arsenic are valuable drugs but not many of you would care to experiment upon yourselves to find out the proper dose. In pulmonary tuberculosis it requires far more experience to decide the "dose" of exercise than is necessary in the use of arsenic or strychnine. More patients fail to recover their health from failure to appreciate the danger that lurks even in gentle exercise than from any other cause.

All of you will fall into one of three classes. First, those who will never again be able to do much work. For them we can offer but little and we cannot decide who they are. Second, those who will be able to do nothing here and for months or even years after leaving will be able to do little or nothing. For them we cannot do very much more than to furnish a resting place. The third group includes those patients who, when they leave here at the end of six months, are going to be able to return to work, many of them to their former occupations. For them we feel that we can do much. For them we have built a workshop where we endeavor to supply work approximating more or less nearly what they must do on their return home. This enables them to get their muscles in training for their work. I believe that no man, no woman should return to his or her work who cannot take a great deal more exercise while here than will be required from them at home. At the end of four months we feel that those who contemplate returning home should begin this regular training and at that time I shall speak of the matter with each of you personally. The work that you accomplish here, in or out of the workshop, is a by-product, the real thing is the effect upon you.

The only way we can attack tuberculosis is by raising the body's powers of resistance to the highest point and then letting it fight against the disease. That is what I mean when I say it takes four years to get over tuberculosis. We cannot cure you in six months but we can get you in such shape here in six months that when you return home you will know how to take the right care of yourself and to keep your body in such shape that it can not only hold its own against the tubercle germ, but that it can also fight against it and in three or four years overcome it. It does take that length of time and it does require that kind of treatment.

This sanitarium is divided into two parts. The reception building I like to look upon as a college, a place where men and women go and have set out for them each day certain tasks which they must do. They must come every day to the class room for a certain number of hours to recite upon, as it were, so much history, philosophy, Greek or biology. When we put you here and watch you we are putting you through a college of hygiene. When we have corrected your mistakes and you have learned your tasks and the problem you have to face, you go to the "university," which is the main body of the sanitarium. A university is conducted very differently from a college. A university is a place where a man can pursue original work, where he has a certain problem given him to work out, which he can do with the assistance of the professors. If a difficulty arises he consults them and they give him help and aid in solving his problem. That is what the rest of this sanitarium is like. We realize fully that you will have to solve this problem for yourself. We cannot make you get well; all we can do is to give you help. We can give you as good a chance here as you can find almost anywhere and we want you to think over the whole thing seriously and earnestly and if anything comes up which you don't understand, come and talk it over. We want you to understand that when you leave this reception building the matter is largely in your own hands. We can watch you for six months and send you out; and then, in a week, a day, an hour, you can upset all we have done. It is a mere waste of time to try to *make* a man take care of himself. You can lead a horse to water but you cannot make him drink, nor can you *make* a person get well. You can give him every chance, but beyond that there is little to be done. Constant care day in and day out must be the watchword for the next four or five years for all of you and if you do that, I think the vast majority of you here will be in excellent shape at the end of that time.

In every community like this, in every village, city or state, it is necessary to have certain rules to govern the inhabitants of these places in their conduct toward one another. We have to have a few simple rules. You have our rule book. Every rule has been thought over carefully. We revise them thoughtfully every year, cutting out whatever is possible and leaving only those that we think are vitally important for you. *You* must carry on the spirit of the place and hand it down to others that come after you. If you do not you fail to get the best out of your stay here. Every time you do not understand something, if you will come and talk the matter over with us, we will try to explain it and if we cannot and cannot give you a reason for it, we will take that rule out of the book. We want you to carry them out not only in the letter but in the spirit of the law. The whole place is run for you and we want it to be run largely by you.

After all, the most important thing is to be able to control one's self. If you do not develop self control while you are here, so that when somebody comes along who wants you to do things you know you should not, and to whom you cannot say no, then your time here has been lost. Unless you can say no when the occasion comes, your chances for getting well are very slight. You can tear down in one day or in an hour what it has taken you six months to build up.

I would like to refer you to two simple books, not because they are better than others, but because they will help you.

Hygiene of the Lung in Health and Disease by Leopold von Schrotter. This book speaks simply of the anatomy, the physiology and the hygiene of the lung. I do not fully agree with all of it, but it is a good book.

Tuberculosis. A Preventable and Curable Disease, by S. Adolphus Knopf. This is an excellent reference book and all of you should have it.

KEEP A-RESTIN'

If you strike a "temp." of one hundred and two,
Keep a-restin';
If you burn thro' and thro',
Keep a-restin';
'Taint no use to pout and whine
'Cause the mercury goes up the line—
Shake it down and keep on tryin',
Keep a-restin'.

—R. W. B.

NEW SITTING-OUT BAG FOR FRESH AIR CLASSES*

BY FRANK H. MANN,

SECRETARY NEW YORK CITY COMMITTEE ON PREVENTION OF TUBERCULOSIS

The Committee on the Prevention of Tuberculosis of New York City has just devised a new sitting-out bag to be used in the fresh air classes for anaemic children in the public schools of that city. When the Committee first began its work in connection with these classes three years ago it was unable to find a suitable sitting-out bag for the use of the children. A special bag was devised at that time by the Secretary of the Committee modeled on the famous Kenwood Rug. Two years of use, however, proved that it did not

provide sufficient warmth for the shoulders. It only came up under the arms, so that it was necessary to wear a sweater in order to keep the upper part of the body warm.

After making a careful study of the bag and conferring with the teachers of the various classes, the Secretary of the Committee has devised a new bag which is now being used with satisfactory results. This outfit is larger than the original one, and is so arranged that it falls over the shoulders in the form of a cape. It thus provides adequate warmth for the upper part of the body without having the more or less cumbersome bag portion extend up any further than before. Freedom of movement of the hands and arms is of course a necessity in school and is fully provided for by the cape idea, without sacri-

ficing the needed warmth about the shoulders.

The garment is made of heavy brown felt. The bottom is square in shape and reinforced

with extra heavy material about one inch in thickness to protect the feet from the cold weather. In addition the bottom is covered with a special detachable piece of canvas to insure against wear and tear. The system of

*The sitting out bag referred to in this article is manufactured by the Kenwood Mills, Albany, N. Y.

fastenings was specially devised to facilitate convenience in getting in and out of the bag. A series of snap catches all the way from head to foot make the means of access far more practical than the old way of stepping in and out from the top. Hooks around the garment at the center enable the wearer to buckle it snugly about his waist. Another interesting new feature is the pocket at the side provided for handkerchief and mittens.

The accompanying illustrations give a splendid idea of the design of the new bag and also show how serviceable it is for children of all sizes. The boy in the picture is the largest child in the class, the girl the smallest; yet the same size bag is used for both. This is a great advantage over the old outfit, as it does away with the necessity of measuring and fitting each child separately.

TUBERCULIN DAYS

Fill us up, fill us up with tuberculin,
Weekly doses cure tuberculosis;
Oh, oh, oh, that needle so thin,
Hurts like blazes beneath the skin;
Fever up, pulse up from tuberculin
Gets us doubting when our wings are sprouting,
Never, never, never again!
For that old tuberculin.
—FRANK CHURCH (age 12), *Children's Day Camp, Bellevue Hospital, New York.*

EMPLOYMENT OF TUBERCULOUS PATIENT

[**Note by the Editor:** The following statement is a summary of the answers received from a questionnaire sent out by a committee of the trustees of the New York State Hospital for the Treatment of Incipient Pulmonary Tuberculosis at Ray Brook. The committee consisted of Dr. J. H. Huddleston, John R. Shillady and Dr. A. H. Garvin. The summary deals both with the problem of employment within the sanatoria themselves, and with suggestions for occupation after discharge.]

Early in 1911, a circular letter was sent by a Committee of the Board of Trustees of the New York State Hospital for the Treatment of Incipient Pulmonary Tuberculosis at Ray Brook, N. Y., to the various sanatoria and anti-tuberculosis organizations of this country to learn:

(1) What occupations for patients can wisely be introduced into sanatorium treatment

(a) to assist in the maintenance of the institution,

(b) to educate the patient in a new occupation, if this is thought advisable or necessary.

(2) What is now being done in this direction in institutions (a report of actual work done under "a" and "b") and

(3) What success has been attained in towns and cities in securing healthful employment for discharged sanatorium patients.

Two hundred letters were mailed and eighty-four answers received. The information obtained was based in some cases on experience, but in many cases was advisory and represented the theoretical belief of the writer. No success was reported under the third head.

In order, as far as possible, further to learn the exact practice in the sanatoria, a letter was prepared cataloging the information received, and requesting blanks to be filled out, giving a statement of what was actually being done. A summary of the replies follows.

In answer to the first question, with regard to assistance in the maintenance of the institution, or to service actually rendered by patients as a part of their graded exercise, thirty-seven sanatoria replied completely enough to permit of tabulation. In the following tables, the number of times the occupation was used to assist in maintenance appears in the numerical column. When an occupation could not be well classified under the existing heads, or when it appeared but once, it was listed under miscellaneous.

ASSISTANCE IN MAINTENANCE OF INSTITUTIONS

By Men

14 Driving.
21 Painting.
12 Electrical repairing.
25 Raking and watering lawns.
15 Mowing grass.
22 Fixing flower beds.
12 Caring for hennery.
24 Gardening—15 minutes to 3 hours daily.
5 Road making.
2 Reforesting.
5 Cultivating soil.
23 Attending laboratory or animal house.
20 Carpentering.
24 Carrying diets.
11 Operating incinerator.
11 Polishing brass.
2 Working in box factory.
7 Making sputum cup linings.
27 Caring for rooms.
2 Cutting wood.
2 Snow shovelling.
6 Clearing land (timber cruising, burning brush, measuring land).
7 Kitchen occupations.
3 Waiter.
4 Laundry work.
4 Machinist.
2 Librarian.
2 Nursing.
2 Tailoring.
2 Photography.
2 Medical assistant.
2 Barber.
21 Miscellaneous occupations, each mentioned once.

By Women

31 Bed making.
25 Care of room.
24 Washing dishes.
13 Stenography.
18 Seamstress.
13 Clerk.
19 Household duties.
18 Setting trays.
21 Dusting.
6 Telephone operating.
18 Mending washed clothing.
6 Light gardening, flowers, lawns.
2 Gauze handkerchiefs.
3 Light laundering.
6 Nursing.
4 Waitress.
3 Librarian.
2 Making supplies.
2 Fumigation.
2 Kitchen work.
8 Detailed house tasks—different.

The following list shows the number of times each occupation appeared as a theoretical suggestion, although not actually adopted in the sanatorium recommending the work.

ASSISTANCE IN MAINTENANCE OF THE INSTITUTION; THEORETICAL SUGGESTIONS

For Men

18 Caring for hogs or other live stock.
8 Working in dairy.
22 Cabinet work.
20 Bookbinding.
17 Work in hot house.
1 Bookkeeping.
3 Keeping chickens.
2 Careful farm work.
2 Hammock weaving.
1 Gardening.
1 Care of lawns.
1 Road making.
1 Reforesting.
1 Basket weaving.

For Women

1 Seamstress.
1 Setting trays.
1 Dusting.
1 Mending.
1 Clerical.
1 General ward care.
1 Hot house care.
1 Scientific gardening.

The next table gives the information obtained from the various sanatoria showing to what extent an endeavor is made to teach the patient a new occupation. A comparison of this with the preceding tables gives a fair idea of the value of the education actually furnished.

EDUCATION FOR NEW OCCUPATIONS

For Men

18 Care of poultry and incubators.
15 Painting.
9 Care of automobiles.
6 Draughtsmanship.
21 Farming and truck gardening.
17 Carpentering.
4 Brass hammering.
3 Photography.
1 Telegraphy.
1 Stenography.
1 Sign writing.
1 Barber.
1 Surveying.
1 Chicken farming.
1 Bookbinding.
1 Ward work.
1 Picture framing.

For Women

14 Sewing.
1 Telegraphy.
10 Typewriting.
9 Shorthand.
4 Drawing.
3 Modelling.
6 Millinery.
7 Dressmaking.
8 Embroidery.
5 Cooking.
21 Training for nurses of tuberculous cases.
1 Raffia work.
2 Gardening.
1 Knitting.

The following table gives the varieties of instruction various sanatoria would like to give but are not now in the position to give.

EDUCATION IN THE SANATORIUM, THEORETICAL SUGGESTIONS

For Men

17 Stenography, typewriting and bookkeeping.
18 Wood carving.
12 Making collars and cuffs.
21 Forestry.
19 Photography.
16 Bookbinding.
19 Agriculture.
26 Poultry raising.
21 Fruit farming.
2 Landscape gardening.
1 Painting.
1 Carpenter.
1 Agriculture as pastime.
1 Bee keeping.
1 Telegraphy.

For Women

20 Basketry.
19 Weaving.
13 Collar and cuff making.
1 Pottery.
1 Embroidery.
2 Stenography.
1 Nursing.
1 Housework.
1 Fruit farming.
1 Poultry raising.
1 Gardening.

It should be noted as a possibly curious omission that no sanatorium gives or recommends instruction in cooking.

The institutions reporting recommendations for the occupations of discharged patients give the following list.

OCCUPATIONS DESIRABLE FOR DISCHARGED PATIENTS

Men

30 Drivers.
27 Motormen.
23 Office work.
31 Attendants on tuberculous cases.
18 Newspaper work.
17 Janitor.
31 Chicken farming.
1 Truck gardening.
1 Newstand.
1 Painting out of doors.
1 Watchman.
6 Collector—solicitor.
1 Chauffeur.

Women

25 Nursing tuberculous cases.
1 Office work.
2 Light housekeeping.
1 Chicken farming.
1 Gardening.
1 Care of children.
1 Collecting.

The sanatoria recommending these occupations qualified their recommendations by requiring that the conditions of work should be hygienic. Thirteen advised serious consideration of a return to the old occupation. The answers to the questionnaire showed also that the average length of stay is five and four-tenths months, that work is usually obligatory on patients able to exercise, and that this work is practically not remunerated. Of the entire number of patients in all the reporting institutions 33% did not work. Deducting from this list five institutions that were for the care of advanced cases only, 28% did not work. In the five hospitals 38% of their patients did not work.

Of the entire list of more than 5,000 patients, the number of incipients is approximately 1,000 or 20%. It is interesting to note that even in the hospitals for advanced cases, the number of patients on exercise is considerable. This agrees with the experience in such hospitals that the number of bed patients never equals the expectation. It is true, however, that in the sanatorium regime a patient is put to bed for apparently slight reasons, whereas in a hospital for advanced cases the patient is allowed more latitude, and follows more his own personal desires.

Certain questions and answers may be considered separately.

Do patients make their own beds? The answer is "yes" in every instance. Practically all of the up-patients make their own beds, and in some of the sanatoria the making of the bed is not counted as exercise or work, there being a few more patients making their beds than are listed as on any work.

Do patients care for their own rooms? Sixty per cent of the institutions reporting require this definitely. As many of the hospitals and sanatoria operate on a ward plan, it is a little difficult to determine just the extent of this work, but this question parallels the previous one. In one sanatorium, all patients are required to take care of their own rooms.

Do patients help about the dining room? Sixty per cent answer "yes." Approximately 3% of the total population reporting give some assistance in the dining room. The number in each instance is small.

Do patients help about the kitchen? The answer is "yes" in five instances only, or approximately 8%. The number of patients actually reported as working is less than 1% of the total number.

Do patients help about the laundry? The answer is "yes" in seven instances. The number actually assisting, however, is less than ½%.

Do patients help about the farm and garden? The answer is "yes" in 21 instances. Four per cent plus of the patient body assist in this respect during the season.

Do patients assist in clerical work? The answer is "yes" in 24 instances. One per cent of the total patient body is thus engaged.

Do patients have work not necessarily connected with the maintenance of the institution? Five institutions report that patients do work of a pastime nature, from which they derive either entertainment or small incidental compensation. The number thus engaged is indefinite.

Is there a teacher? Fourteen institutions, or approximately 28% report having teachers. The total number of teachers reported is 22, 13 of whom are school teachers for children; and 8 are trade school teachers (the Day Camp, Southfield, has a garden teacher in season, who has been classed under trade teacher).

Is there a shop where patients can work? The answer is "yes" in six instances. The number actually reported as working in the shops, however, is extremely few and noted as variable. About ½% of the total number and approximately 3% of the patients in the institutions with shops are thus employed.

Number of physicians? The ratio of physicians to patients is approximately one to fifty. Thirty-five per cent of the physicians engaged in the work were formerly tuberculous.

Number of nurses? The ratio of nurses to patients is one to fifteen patients. Thirty per cent of the nurses engaged in the work were formerly tuberculous.

Number of employees? The ratio of employees formerly tuberculous to the total number of employees is 30%. The ratio of employees to patients is one to four.

The ratio of the total number of officers and employees, including staff nurses and employees, to the patient body, is one to three.

QUESTIONNAIRE

NAME OF SANATORIUM	Capacity	Average length of stay	Is work obligatory on patients able to exercise?	Is work done by patients remunerated?	How many patients do not work?	Do patients make up their own beds?	How many?	Do patients care for their own rooms?	How many?	Do patients help about dining room?	How many?
		mos.									
Manitoba San. for Con.	..	4½	yes	few	40	yes	40	partly	40	..	..
Tranquille San. for Con.	90	9	yes	no	40	yes	35	yes	35	no	..
Toronto Free Hospital.	110	4	yes	no	50	yes	50	yes	50	yes	12
Mountain Sanatorium.	62	?	yes	no	42	yes	18	yes	18	yes	3
Barlow Sanatorium.	70	12	yes	no	20%	yes	80%	yes	80%	yes	4
Natl. Jewish Hosp. for Con.	130	6	yes	no	..	yes	..	partly	..	yes	..
Agnes Memorial San.	150	7	..	..	..	..	..	..	..	..	..
Wildwood San.	50	3	..	..	..	yes	up pts.	..	..	yes	2
D. C. Tuberculosis Hosp.	120	5	yes	?	70	yes	65	yes	varies	yes	2
Edward San.	60	4	yes	..	25%	yes	..	no	..	yes	..
Boehne Camp.	25	3	..	..	4	yes	..	yes	..	yes	..
Iowa State San.	120	?	yes	no	8	yes	94	yes	96	yes	4
Eudowood San.	100	4	yes	sl	30	yes	60	yes	25	yes	8
Minn. State San.	90	4.5	yes	sl.	70	yes	up pts.	yes	most	yes	few
Michigan State San.	70	5.5	yes	no	50%	yes	75%	yes	75%	no	..
Detroit Tuberculosis San.	40	4	..	..	..	..	..	..	..	..	..
Day Camp Westfield.	D. 125	..	yes	no	..	..	..	..	..	yes	..
	N. 24	..	..	..	..	yes	all	..	..	..	..
Rutland State San.	350	6.5	yes	no	194	yes	200	no	..	yes	17
Westfield State San.	150	5	yes	no	..	yes	110	no	..	yes	3
Lakeville State San.	150	5	yes	no	25%	yes	up pts.	yes	33%	no	..
Sharon San.	23	6.2	yes	..	5–10%	yes	all	yes	all	no	..
N. Reading San.	160	5.5	yes	no	100	yes	71	no	..	yes	10
Stony Wold San.	106	9	yes	no	20	yes	..	yes	..	no	..
Gabriels San.	60	..	no	..	no	..	..	..	..	no	..
Adirondack Cottage San.	110	..	yes	no	28	..	..	..	..	..	..
Montifiore Home, Country.	180	..	yes	no	30	yes	155	..	..	yes	8
Lakeview Hosp.	50	2.6	yes	no	11	yes	24	yes	24	yes	5
Metropolitan Hosp.	950	..	no	no	284	yes	600	..	..	yes	50
Day Camp, Southfield.	D. 110	..	..	..	..	..	..	..	..	..	..
	N. 22	2.3	yes	little	60%	yes	all	..	..	yes	..
N. H. State San.	34	5	yes	no	..	yes	..	yes	..	yes	..
Maryland State San.	200	5	yes	no	..	yes	..	yes	..	yes	..
Ohio State San.	144	3.5	yes	no	..	yes	all	yes	all	no	..
N. J. State San.	160	4	yes	no	20	yes	up pts.	yes	up.pts.	yes	15
U. S. Marine Hosp.	250	..	yes	yes	100	yes	180	yes	180	no	..
White Haven San.	216	3	yes	no	..	yes	up pts.	yes	..	yes	..
R. I. State San.	130	5	yes	no	42	yes	85	..	..	yes	25
Wis. State San.	140	5.2	yes	little	30	yes	80	yes	80	..	..
N. Y. State San.	260	7.04	yes	no	15	yes	225	yes	220	yes	3

QUESTIONNAIRE—Continued

NAME OF SANATORIUM	Do patients help about kitchen?	How many?	Do patients help about laundry?	How many?	Do patients help about farm or garden?	How many?	Do patients help in clerical work?	How many?	Do patients have work not necessarily connected with care of institution?	How many?	Is there a teacher		
											School	Trade	Garden
Manitoba San. for Con	..	..	yes	2	yes	15	yes	2	..	..	...	...	...
Tranquille San. for Con	..	..	..	..	yes	12	..	..	..	..	...	...	...
Toronto Free Hospital	..	..	..	..	yes	12	yes	6	..	..	1	1	...
Mountain Sanatorium	..	..	..	..	yes	2	..	..	..	..	1	...	...
Barlow Sanatorium	yes	indef.	..	..	..	..	..	..	..	..	...	...	...
Natl. Jewish Hosp. for Con	..	..	..	..	..	..	yes	..	..	..	1	1	...
Agnes Memorial San	..	..	..	..	..	..	..	..	..	..	...	...	...
Wildwood San	..	..	..	..	..	..	yes	1	..	..	...	...	...
D. C. Tuberculosis Hosp	..	..	..	..	sl.	..	..	..	..	..	...	...	...
Edward San	..	..	..	..	yes	..	yes	..	..	..	...	...	...
Boehne Camp	no	..	..	..	yes	..	..	..	..	..	...	...	...
Iowa State San	yes	1	yes	1	yes	2	yes	2	..	..	1	...	...
Eudowood San	no	..	..	..	yes	12	yes	3	..	..	...	...	...
Minn. State San	..	..	..	..	yes	few	yes	few	..	..	...	...	...
Mich. State San	no	..	..	..	..	..	..	..	..	..	...	...	...
Detroit Tuberculosis San	..	..	..	..	..	..	..	..	..	..	...	...	...
Day Camp Westfield	yes	..	..	..	children	40	no	..	yes	..	2	no	1
Rutland State San	no	..	no	..	no	..	yes	3	..	..	...	...	...
Westfield State San	..	..	..	..	yes	2	yes	2	..	..	1	...	...
Lakeville State San	yes	12	..	..	yes	season 30%	..	..	..	..	...	...	...
Sharon San	no	..	no	..	yes	75%	no	..	..	..	...	...	...
N. Reading State San	no	..	yes	9	yes	3	yes	2	..	..	1	...	...
Stony Wold San	no	..	..	..	..	..	yes	..	..	..	1	...	...
Gabriels San	no	..	..	..	..	..	..	..	..	..	...	...	...
Adirondack Cottage San	..	..	..	..	..	..	yes	..	work shop voluntary	..	...	3	...
Montifiore Home, Country	..	..	..	..	..	..	yes	1	..	..	...	1	...
Lakeview Hosp	..	..	yes	1	..	..	yes	1	..	..	...	...	...
Metropolitan Hosp	yes	30	no	..	yes	6	yes	3	..	..	1	...	...
Day Camp, Southfield	yes	..	..	..	children	40	yes	3	..	..	2	1	...
N. H. State San	no	..	..	..	..	..	yes	..	..	..	...	...	...
Maryland State San	no	..	..	..	yes	..	yes	..	..	..	1	1	...
Ohio State San	no	..	yes	2	yes	7	no	..	..	..	...	...	...
N. J. State San	..	..	yes	6	little	..	yes	6	..	..	1	...	...
U. S. Marine Hosp	..	..	..	..	..	..	yes	12	private work	25	...	...	...
White Haven San	no	..	..	..	yes	..	yes	..	yes	..	1	...	...
R. I. State San	no	..	..	..	yes	32	yes	2	hand work	15	...	...	...
Wis. State San	..	..	..	..	yes	10	yes	..	yes	20	...	...	...
N. Y. State San	yes	18	yes	8	yes	15–20	yes	2	volitional	..	...	...	...

QUESTIONNAIRE—Continued

NAME OF SANATORIUM	Is there a shop in which patients can work?	How many work in it?	No. of physicians	How many formerly tuberculous?	No. of nurses	How many formerly tuberculous?	No of employees	How many formerly tuberculous?	MEN							
									Avg. no. men	1 Avg. no. first stage	1 Avg. no. doing some work	2 Avg. no. second stage	2 Avg. no. doing some work	3 Avg. no. third stage	3 Avg. no. doing some work	Avg. no. bed cases
Manitoba San. for Con...	..	..	1	1	3	..	16	2	30	3	..	6	..	18	1, 2 & 3	7
Tranquille San. for Con...	..	..	1	..	6	..	19	3	52	10	6	21	6	21	13 3	20
Toronto Free Hospital...	..	..	3	..	18	..	25	..	60	..	..	30	20	30	..	20
Mountain Sanatorium....	..	..	1	..	5	3	16	9	20	3	1	8	2	9	1	12
Barlow Sanatorium.....	..	..	1	..	4	2	6	..	38	..	..	..	..	..	..	..
Natl. Jewish Hosp., Con..	yes	?	5	..	10	..	28	6	87	major.	..	..	..	..	..	6
Agnes Memorial San.....	..	..	5	4	10	5	?	?	85	17%	..	45%	..	38%	..	10%
Wildwood San.....	..	..	1	1	4	..	7	2	27	6	6	15	15	6	6	2
D. C. Tuberculosis Hosp..	..	..	3	0	7	0	24	3	55	3	3	17	17	35	5	20
Edward San.....	..	..	2	..	3	..	12	4	29	18	..	9	..	2	1, 2 & 3	
Boehne Camp.....	..	..	2	..	1	..	3	..	16	6	3	6	..	4	25	5
Iowa State San.....	..	..	2	2	4	2	42	6	30	22	18	5	5	3	..	4
Eudowood San.....	yes	6	3	..	5	4	13	2	51	16	14	18	12	17	3	3
Minn. State San.....	..	..	2	1	7	6	41	10	50	10	10	30	5	10	3	10
Mich. State San.....	..	..	1	1	6	5	29	6	30	4	4	15	2	10	..	4
Detroit Tuberculosis San.	..	..	1	..	5	1	12	..	20	5	..	10	..	5	..	6
Day Camp Westfield.....	no	..	6	..	D. 2 N. 1	.. ..	6 1	50 24	24 15	.. ..	.. ..	24 9	.. ..	2 ..	.. ..	8 ..
Rutland State San.....	..	..	3	1	33	23	200	103	179	20	16	109	53	50	16	50
Westfield State San.....	yes	3	3	1	9	2	62	18	84	8	3	19	13	57	12	28
Lakeville State San.....	..	..	3	..	15	..	60	7	85	10%	..	37%	..	53%	1, 2 & 3 75%	37%
Sharon San.....	..	..	1	..	2	..	7	..	..	..	..	..	..	..	..	..
N. Reading State San....	..	..	3	..	18	1	66	2	83	2	2	12	8	69	15	26
Stony Wold San.....	..	..	3	3	5	3	60	?	..	..	..	..	..	..	..	..
Gabriels San.....	..	..	2	1	3	..	15	..	24	1	..	15	..	8	..	1
Adirondack Cottage San..	yes	voluntary	4	4	5	5	..	..	..	..	..	..	..	..	..	..
Montifiore Home, Country	..	..	4	..	10	1	39	5	108	50	50	31	31	10	..	10
Lakeview Hosp.....	..	..	1	..	3	..	10	..	23	2	2	9	8	12	3	8
Metropolitan Hosp.....	..	..	7	1	63	2	67	32	796	15	15	300	300	200	200	28
Day Camp, Southfield....	..	..	5	..	4 3 teachers	.. T.B.	5	3	35	10	10	15	12	10	5	..
N. H. State San.....	..	..	1	..	3	3	11	6	16	3	3	8	..	5	..	6
Md. State San.....	..	..	4	4	14	13	30	..	110	15	..	50	..	45	..	10
Ohio State San.....	..	..	2	..	4	1	47	6	50	50	50	..	..	..	..	..
N. J. State San.....	..	..	2	..	6	1	47	15	90	28	25	48	45	14	10	6
U. S. Marine Hosp.....	..	..	5	4	7	5	64	42	200	16	16	46	38	138	46	32
White Haven San.....	carpenter	4	6	3	25	25	80	75	125	50	50	50	..	25	..	..
R. I. State San.....	..	..	3	2	7	5	40	25	75	2	1	70	45	4	..	12
Wis. State San.....	..	..	3	..	8	3	30	5	65	13	13	42	30	10	..	6
N. Y. State San.....	yes	6	4	2	10	9	95	38	124	71	69	40	36	13	7	..

QUESTIONNAIRE—Continued

NAME OF SANATORIUM	WOMEN								CHILDREN							
		1		2		3				1		2		3		
	Avg. no. women	Avg. no. first stage	Avg. no. doing some work	Avg. no. second stage	Avg. no. doing some work	Avg. no. third stage	Avg. no. doing some work	Avg. no. bed cases	Avg. no. children	Avg. no. first stage	Avg. no. doing some work	Avg. no. second stage	Avg. no. doing some work	Avg. no. third stage	Avg. no. doing some work	Avg. no. bed cases
Manitoba San. for Con...	30	3	..	8	..	19	1, 2 & 3 7	8	..	..	..	..	..	..	..	..
Tranquille San. for Con...	24	2	2	11	3	10	..	..	1	..	..	..	..	1	..	..
Toronto Free Hospital...	30	..	..	15	10	15	..	12	15	10	8	5	2	..	..	2
Mountain Sanatorium....	16	4	2	10	1	2	..	9	16	14	2	1	..	1	..	10
Barlow Sanatorium.....	25	..	..	..	..	..	..	..	..	..	..	2	..	1	..	..
Natl. Jewish. Hosp., Con.	43	maj.	..	..	..	..	..	5	4	..	..	..	..	..	..	..
Agnes Memorial San.....	66	17%	..	45%	..	38%	..	10%	..	..	..	..	..	..	..	..
Wildwood San.....	20	4	4	12	12	4	4	4	..	..	..	..	..	..	..	..
D. C. Tuberculosis Hosp..	35	..	..	10	10	25	3	15	2	..	..	2	..	..	..	..
Edward San.....	30	18	..	10	..	2	..	5	4	4	..	..	..	..	..	..
Boehne Camp.....	25	15	..	5	..	4	..	4	8	8	..	..	..	..	..	..
Iowa State San.....	70	60	52	6	5	4	3	9	7	6	5	1	1	..	..	..
Eudowood San.....	44	12	10	15	10	17	3	16	..	..	..	..	..	..	..	..
Minn. State San.....	50	10	10	30	5	10	..	4	..	..	..	..	..	..	..	..
Mich. State San.....	30	10	10	11	2	9	..	5	3	1	..	1	..	1	..	1
Detroit Tuberculosis San.	20	5	..	10	..	5	..	8	3	2	..	1	..	..	..	..
Day Camp Westfield.....	25	12	..	12	..	1	..	..	50	40	..	9	..	1	..	..
Rutland State San.....	162	38	26	9	39	34	6	70	2	2	2	..	..	..	..	..
Westfield State San.....	72	8	2	20	7	44	8	30	10	3	3	6	2	1	1	1
Lakeville State San.....	75	10%	..	37%	..	53%	1, 2 & 3 75%	37%	4	..	..	..	..	..	..	..
Sharon San.....	21	60%	all	30%	75%	10%	5%	2%	..	..	..	..	..	..	..	..
N. Reading State San....	75	3	3	13	10	59	12	40	3	..	..	1	..	2	..	..
Stony Wold San.....	80	..	..	..	..	1, 2 & 3 60	..	..	20	..	..	..	..	..	1, 2 & 3 17	..
Gabriels San.....	22	6	..	14	..	2	..	..	..	..	..	..	..	..	..	..
Adirondack Cottage San..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Montifiore Home, Country	52	37	37	20	20	19	..	..	10	1 & 2 9	9	..	..	1	..	..
Lakeview Hosp.....	8	1	1	3	3	4	..	4	1	..	..	..	..	1	..	1
Metropolitan Hosp.....	140	..	..	..	..	..	..	..	30	..	..	..	..	..	..	..
Day Camp, Southfield....	15	8	8	5	5	2	..	..	60	45	30	12	5	3	..	..
N. H. State San.....	18	4	4	7	..	7	..	7	..	..	..	..	..	..	..	..
Md. State San.....	100	15	..	40	..	65	..	10	25	20	..	3	..	2	..	..
Ohio State San.....	50	50	50	..	..	..	..	..	9	9	..	..	..	..	..	..
N. J. State San.....	60	21	18	29	25	9	6	4	10	9	6	2	2	2	1	1
U. S. Marine Hosp.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
White Haven San.....	75	25	..	25	..	25	..	..	10	5	..	5	..	..	..	..
R. I. State San.....	50	2	1	45	30	3	..	8	15	..	..	..	..	..	..	..
Wis. State San.....	60	12	12	40	25	8	..	10	3	..	..	..	..	..	..	..
N. Y. State San.....	124	71	60	40	36	13	7	..	..	..	..	..	..	..	..	..

TUBERCULOSIS IN MOTION PICTURES

BY PHILIP P. JACOBS, PH. D.

Three years ago in the fall of 1910 the Thomas A. Edison Company was induced by The National Association for the Study and Prevention of Tuberculosis to prepare a film on this disease which could be used primarily in the Red Cross Christmas Seal campaign, but which would have value also the year around. The result of this effort was a film entitled, "The Red Cross Seal."

So phenomenal was the success of this picture as it was exhibited throughout the United States, and even in Europe, that the Edison Company needed no further urging to induce them to produce further pictures along the same line. In fact, the two tuberculosis pictures which were produced in 1910 and in 1911 by this company were among their leading commercial successes. Backed up by the publicity of the National Association and reinforced by the work of hundreds of Anti-tuberculosis Associations and Red Cross Seal agents, these films have attracted more attention than even the most sanguine of their promoters had thought possible.

ELLEN SEES HER NEIGHBOR'S SON STRUGGLING WITH TUBERCULOSIS (*The Red Cross Seal*)

JORDAN GIVES THE CONSUMPTIVE BOY A CHANCE FOR LIFE (*The Red Cross Seal*)

Again in 1912 the Edison Company, now making a picture of this character a sort of annual holiday feature, have brought out a new film, entitled, "Hope—A Red Cross Seal Story," the scenario for which was prepared especially for the anti-tuberculosis movement by James Oppenheim, the well-known writer. This film is by far, both in its dramatic and in its other features, the best of its kind that has ever been issued, and present indications point to an unusual run for it.

Possibly a word with reference to the method of distributing these films would be of interest and value. The motion picture industry in the United States is sharply divided into two main groups; in one group are about 60 to 75 per cent. of the theatres, including the best houses in the country, who are allied under the General Film Company, which in turn is, in a sense, subsidiary to the Motion Picture Patents Company. The theatres operating in this group are popularly known as "trust" theatres. In the other group are a number of theatres which are operated under different combinations of exchanges and manufacturers, but which, as a whole, are generally termed "independent" or non-trust theatres. Under the Motion Pictures Patent Company and through them under the General Film Company, thirteen film manufacturers in this country and Europe produce and distribute their products. The arrangements for the distribution of the pictures are very closely limited. For instance, any manufacturer who is in a trust is forbidden to allow any of his pictures to be sold outright. He may lease them for an indefinite period, usually eight months. He cannot, moreover, lease, sell or loan any of his pictures to any theatre or combination of theatres in the independent group. The General Film Company has practically the right of way in the matter of handling the entire output of all these theatres. Through its various branches or "exchanges" in almost every large city it controls the bulk of the theatres in the United States. When the local theatre manager wishes to procure a trust picture, he applies to his exchange, provided his is one of the theatres operating under the trust. The exchange has a fixed arrangement with its various customers, numbering sometimes several hundreds, whereby certain customers, by paying a stipulated price, always secure every picture that the exchange issues within the first few days af-

ter its release. This is called a "first-release" service. Similarly, other theatres pay a lesser sum for a "second-release" service and so on to "fifth and sixth-releases." If, therefore, a theatre having a third-release for instance, wishes to secure a picture within the first week after its issue, it would be practically impossible for that theatre to secure the film until such time as it came around in turn to it.

The Edison Company is one of the manufacturers operating under The Motion Picture Patents Company. All the pictures which have thus far been issued in coöperation with the National Association are limited by the restrictions just mentioned.

EDITH WELLS FINDS SHE HAS A CHANCE FOR TREATMENT AT BELLEVUE HOSPITAL TUBERCULOSIS CLINIC

The aim and object of the three pictures on tuberculosis which the Edison Company have produced in connection with the Red Cross Seal campaign has been primarily to present certain features of the anti-tuberculosis movement in a dramatic and interesting manner, so that the public, seeing these pictures, would be induced to support the anti-tuberculosis campaign. A story is fundamental to the motion picture scenario, since the dry details of taking the cure and of the various other propaganda in the tuberculosis movement are hardly of sufficient interest to arouse the enthusiasm of the million people who visit the motion pictures every day.

Thus, for instance, "The Red Cross Seal," which was issued in 1910, has a very interesting plot which centers about the winning of a prize of one hundred dollars for the best design of the Red Cross Seal. The heroine of the story is Ellen Williams, a poor girl of the tenements who makes her living by decorating lamp shades for very meager wages. Ellen has applied to the Art School, where she longs to take a course of study, but she finds to her sorrow that the tuition fee of one hundred dollars is too much for her scanty purse. As she turns to leave the school, Jordan, a young man of wealth, sees her in the office and is struck by the pathos of her beauty and disappointment. He learns her story from the registrar of the school and resolves to find out for himself "how the other half lives." He gives up his seemingly aimless life of ease and pleasure, and, dressed as an ordinary day laborer, rents a

room in the same tenement with Ellen. He soon comes to know the girl and in a short time becomes greatly attached to her. He watches with great interest as she struggles hard to draw a design for the Red Cross Christmas Seal, which will bring her one hundred dollars and will give her sufficient money so that she can enter the art school. His love for her is increased when he sees her give up all of the ambitions of her life as she turns over the one hundred dollars, which she has won, so that a consumptive son of the neighbor across the hall may have a chance to be cured of tuberculosis at a sanatorium.

Struck by this noble sacrifice, Jordan buys the tenement, renovates the neighboring apartment, enlists the coöperation of the visiting nurse, and helps thus to restore the consumptive to health and to remove from his family the danger of further infection. Thus in the end, when Jordan reveals his identity, Ellen finds in his proposal that she shares with him his palatial Fifth Avenue home and the satisfaction of her ambition, all because of the Red Cross Seal.

THE FAMILY DOCTOR EXAMINES EDITH

The story of the "Awakening of John Bond," while not so dramatic in many respects, is more educational with reference to the anti-tuberculosis campaign. The leading characters in the story are Bond, a political boss, his wife, Grace, and Nellie O'Brien, aged 18, living on the lower East Side of New York. The O'Briens, a large family, live in a miserably kept tenement owned by Bond, who refuses to do anything to clean up his building for fear of losing money. Bond is married and sails with his wife on a yachting cruise for a wedding trip, taking with him as a deckhand, George O'Brien, Nellie's brother, who has consumption. On the cruise George fails rapidly and finally dies. Bond's wife nurses him during his sickness and, being with him at the last, takes his death-bed messages. As a result of this close communication with George, Mrs. Bond contracts tuberculosis from him, and is brought back to New York for treatment. On her arrival home, she sends for Nellie to give her George's dying messages, and there Nellie sees and denounces Bond as the murderer of her brother, because he refused to clean up the tenement in which they live, or to help secure a hospital where consumptives might receive free treatment.

Meanwhile, Bond has been trying to find a sanatorium where he may place his wife, but to his horror finds every private sanatorium full, and no room for more patients. He then proceeds to the Tuberculosis Society and finds that there is no public place, because he voted and worked against it. He tries to bribe the secretary to make a place for his wife, but the official takes his money and gives him a package of Red Cross Seals. Bond is at first angry, but when he learns what the Red Cross Seal means, he writes out a check for $150,000 for the campaign and agrees to support the hospital bill. The secretary then shows Bond a tuberculosis exhibit and an open-air school, and arranges for the placing of his wife and the O'Brien children, who also have tuberculosis, in a sanatorium. The last scene shows Bond's wife and the O'Brien children recovered, playing in Bond's parlor, and a committee waiting on Bond, showing how his candidate is being supported because he believes in the tuberculosis hospital.

Possibly no less than ten million people will see the motion picture entitled "Hope—A Red Cross Seal Story," which is being exhibited just now in theatres throughout the United States and Canada.

The story, as portrayed by Mr. Oppenheim, tells of a young banker in a little New York town by the name of John Harvey and of his bookkeeper Wells, with whose daughter, Edith, Harvey is in love. A few weeks before the holiday season, Harvey one day receives a letter and some literature from The National Association for the Study and Prevention of Tuberculosis, asking him to engage in a tuberculosis campaign in his district, to form a committee to sell Red Cross Christmas Seals, and to work for the erection of a local sanatorium. He shows the material to his old bookkeeper and both the men laugh at the idea that a country district need engage in such a fight. Tuberculosis, they believe, is a thing only of the city slums. Careless and unthinking, however, Wells puts some of the pamphlets in his pocket and forgets the incident.

Meanwhile Edith is trying hard to conceal from her father and lover the annoying cough

which she has developed and also the knowledge given to her privately by the old family physician that she has tuberculosis. She struggles hard against her love for Harvey and her father, especially when the banker tells her of the new home which he is building for them. She is about to yield to the country doctor's advice that she need not necessarily go to a sanatorium, when one evening she accidentally discovers the tuberculosis literature in her father's pocket. As she reads of the dangers to which she is exposing those whom she loves, and of the hope of a cure that may be hers if she will go to a sanatorium, she finally conquers her immediate desire and resolves to live for health and a cure. She writes a note to her father, and another to Harvey releasing him from their engagement and leaves home secretly for New York to see what chance she has of being cured, for there is no sanatorium nearer to her home than a day's journey.

After a thorough search of the tuberculosis clinics of New York, Wells and Harvey one day find the record of Edith as registered at the Bellevue Hospital Tuberculosis Clinic, where she is taking the cure in the day time on the ferry-boat day camp, awaiting possible admission to one of the regular sanatoria. They trace her from the clinic to the camp and then to her miserable hall bedroom. Here they find her sick and despondent, but with a grim determination to be cured whatever the cost. They try to persuade her to go with them, but she firmly declares that she will not go home under any circumstances until they have a place where she may take the cure. The little country town has no sanatorium and she realizes that she is getting better in the day camp. It is the bitter realization of this truth that urges Harvey and Wells to arouse their townsfolk to the need of preventing tuberculosis and of erecting a sanatorium. They go home and start a campaign which results in the building of a splendid institution for this purpose. When the institution is completed, it is not a difficult task to persuade Edith to go home and take the cure at the new Sanatorium where she completely recovers her health. Here the symbol of "Hope" as expressed in a painting by Balfour Ker, is realized in the new life which she has received.

NELLIE O'BRIEN DENOUNCES JOHN BOND AS THE MURDERER OF HER BROTHER

THE VISITING NURSE AND TUBERCULOSIS CONTROL*

BY MISS LILLIAN D. WALD, NEW YORK

As every fresh advance from point to point has been made in combating tuberculosis, from hospital accommodation for advanced cases to sanatoria for early cases, to outdoor life and suitable occupation for incipients, to open-air schools and preventoria for delicate predisposed children, with every fresh point taken, the need of close personal individual care and supervision is demonstrated. In nursing and management, in manual service and teaching admonition based on the latest word of science, personal care becomes obviously the indispensable organ of executive control. Even large collective control asserted in a broad and far-reaching way, through social legislation as it may be enacted in the future, will never be possible except as administered and wielded by individuals. At the starting point of every possible avenue of danger of infection or breaking down of human strength there will always be the home, the family, its surroundings, its work, the play places, its heredity, and its degree of intelligence to be watched and guarded.

Every possible method of tuberculosis control comes back finally to this foundation and center of control.

The nurse has been trained for this service. No other agent has as yet been found so useful as she in exerting this intimate control. The writer looks over the field of her employment and finds amazing growth in the appreciation of the advantage of using her in the campaign against tuberculosis.

Twenty years ago, there were not more than twenty graduate nurses at work in the homes of the people. It is only eight or nine years since the first nurse was appointed distinctly for the care of the tubercular, one whose sole and single task was to look up the patients who were "lost" from a large dispensary (the Johns Hopkins of Baltimore).

To-day there are nearly 3,000 nurses, almost all of whom are engaged indirectly in this campaign, and about 500 who are working exclusively for tuberculosis associations.

That this convention may have the record, Miss Y. G. Waters has compiled the statistics which up to May 6, 1912, are as follows:

952 Associations of various kinds employing 2,809 nurses. These include charity organization societies, churches, departments of health, departments of education, dispensaries, Metropolitan Life Insurance Company, hospitals, tuberculosis clinics, factories, shops, State boards of health, and others.

4 State Associations employing 118 nurses.

78 Municipalities employing 861 nurses.

16 Municipalities (in addition to above) subsidized by outside agencies employing 24 nurses.

289 General Visiting Nurse Associations employing 894 nurses for tuberculoiss work.

The State of Pennsylvania has a complete system of tuberculosis dispensaries in every county, and in conjunction with them a staff of nurses equally State-wide.

The Metropolitan Life Insurance Company provides the visiting nurse for its industrial policy-holders, and in a period of three years since the service was established by them, they have extended it from one visiting nurse association which answered calls of their sick policy-holders in one community to 451 centers, taking in altogether 981 cities and towns.

The National Red Cross Society of America is about to inaugurate a service of visiting nursing in rural communities, hitherto neglected in this respect. Directed by a special committee of this effective organization, many communities not in the registered area and remote from the centers of active social propaganda will be given stimulus to organize for nursing and from this, other medical and social measures will inevitably grow.

Those familiar with the plans of the new venture of the National Red Cross Society predict expert administration from it, and in this addition to its functions a new value to the honored society. It requires no great stretch of the imagination to visualize the time, not far distant, when our country will be districted from the northernmost point to the

* Read at the Eighth Annual Meeting of the National Association for the Study and Prevention of Tuberculosis, Washington, May 31, 1912

southernmost with the graduate nurse entering the homes wherever there is illness, caring for the sick, preaching the gospel of health and teaching in simplest form the essentials of hygiene.

Even though all these nurses are not to be engaged exclusively for tuberculosis, they are developing a nation-wide education in personal and domestic hygiene at the most essential point—the home—and utilizing for their patients the medical and social resources existing in their communities, interpreting legislation concernng health and sanitary control, and translating into simplest terms the scientific pronouncements of experts.

There is, however, in the minds of some of these nurses who have been most active in the extension of visiting nursing no little anxiety lest the value of their magnificent opportunity be diminished through faulty administrative regulations that affect the very heart of this service.

In many of the tuberculosis associations there is a tendency to make the nurse's visits purely inspectorial and academic in their education. The writer would strongly emphasize her protest against diminishing the effect of the nurse by withdrawing from her the actual bedside ministration when her patients are in need of such. Her position is one of privilege, and, in fact, her reputation in her district is based largely upon the gratitude felt for one who relieves pain and suffering in the time of need. No other visitor can ever quite reach this position. Even if her social spirit be ardent and her sympathy electric, it is only the most exceptional nurse who can substitute good council and friendly solicitation for the only service that seems "actual" to people who are ill.

I venture to emphasize this because of much discussion upon the subject and the tendency on the part of highly organized tuberculosis associations to lose sight not only of the value of the point I would make, but of the psychology of the nurse herself. Nurses are liable to become mechanical, as are all other people, in a routine that shows no definite concrete effect. The heat of moral zeal cools with the reiteration of formulæ that must often seem impertinent in the face of uncontrollable causes. Even two patients among the day's cases who really need nursing would keep alive in the heart of the nurse the knowledge of her fine heritage of ministration, and giving relief to them would bring satisfaction to her as well.

Professor Winslow said: "The Visiting Nurse is the most important figure in the modern movement for protecting public health."

I hardly think the battle against tuberculosis can be successfully waged without her, but to get her best value standards are needed for the organization and for her. Some of the work actually done today by nurses under a faulty system that does not demand from them more than routine could probably be often carried out by a clerk or a high-school graduate or a friendly visitor. It is easy to learn to give routine instruction—a very responsible position and a difficult one to insure the actual carrying out of these instructions by teaching, by demonstration, by giving the bath and care when necessary, by the management of danger points, by the regulation of family life, etc.

Committees and boards are apt to permit the nurses, indeed to authorize them, to work too hurriedly. They sometimes even forbid the nurses to do nursing, limiting their services to reports and oral instruction. Territories are too large.

Nurses who have had visions of their call to public health movements are likely to keep the real character of their work in prominent view. We still need sentiment and always shall in our contact with the sick, for here a strictly impersonal attitude is a dangerous one, and from it the nurse is preserved by the nature of her ministrations.

The writer realizes that many of the tuberculosis cases are ambulant and that comparatively few can be found in their beds by the visiting nurse. Nevertheless, the divorcing of the instructive from bedside nursing brings about a situation disadvantageous enough to have those engaged in tuberculosis work give it serious consideration.

The Tuberculosis Nurses' Division of the Health Department of Baltimore exemplifies a successful service where the nurses care for the bedridden as well as the ambulant cases in their districts. Many instances might be cited where good preventive tuberculosis work has been accomplished by the nurse, though that was not the primary purpose in employing her. Her persuasiveness many times induces further investigation into physical con-

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Journal of the Outdoor Life

OFFICIAL ORGAN OF THE NATIONAL ASSOCIATION FOR THE STUDY AND PREVENTION OF TUBERCULOSIS; THE NEW HAVEN COUNTY ANTI-TUBERCULOSIS ASSOCIATION.

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The Aim of this Journal is to be helpful to persons seeking health by an outdoor life, and particularly to disseminate reliable information looking to the prevention and cure of tuberculosis. It is entirely philanthropic, and is in no sense a money-making enterprise. It should be distinctly understood, however, that the JOURNAL OF THE OUTDOOR LIFE is not intended to supplant personal medical advice. Anyone suffering from pulmonary trouble who is not under the care and guidance of a physician is taking grave chances.

THE QUESTION OF EMPLOYMENT

A notable amount of information concerning the present practice of institutions has been gathered from the answers to a questionnaire sent by the Trustees of the New York State Hospital for Incipient Tuberculosis to the various sanatoria and hospitals in this country, and is now presented in the Report on Occupations appearing in this issue.

Thirty-eight institutions, treating more than five thousand patients, report that two-thirds of the patients contribute to the maintenance of the institutions by doing some work although only ten per cent do more than care for their rooms and beds. It is obviously impossible to employ for the benefit of the institution itself any large proportion of the patients on any one task. Sanatoria and hospitals are not workshops. Tasks in the laundry, repair room, kitchen, dining room, laboratory, or office, within, and about the farm or garden, stable or stock, carpenter or paint shop, without, are all assigned at times to chosen patients, but the entire number of such jobs is not large, unless there is a demand not made by the institution itself. Further, in the employments suggested as desirable, there are practically no novelties. Almost all those mentioned are in actual use in some sanatoria. No sanatorium, however, makes use of all the occupations proved to be practicable.

The report makes it clear that in the judgment of the sanatorium authorities, some work is at least no hindrance to the progress of a patient towards recovery. The day for recommendation of absolute idleness, of entire physical and mental rest during the whole period of a sanatorium life is apparently past. There is a growing realization of the value in recuperation of such work as is neither strenuous nor monotonous, and not too hurried nor too long continued.

Of distinct importance is the attitude of sanatoria indicated by their recommendations for past-sanatorium occupation. Out of the many suggestions for possible education in sanatoria for later employment outside, there are few which have not been practically tried in some places. It is obvious that in a stay which, as the report shows, averages less than five and a half months, there is little time to teach useful employments after the rest period with which almost all sanatorium treatment begins yet trade teachers and shops have been installed in various places, and efforts are being made to bring about useful results. The very variety of suggestions implies both the absence of any general line of

work to which all cases can be referred, and perhaps also a tendency to individualize in recommendations. Certain it is that the sanatoria are impressed with the necessity of preparing a patient for active life to follow the institutional care, and that there is a growing dread of the psychic effect of long continued idleness, of the depression due to the removal of ambition, and of the disease hospitalism.

The quality which the suggested occupations have in common is, for the most part, evidently that of intermittence; the occupations should be such that they can be carried on with periods of rest, and they should, further, not require severe muscular exertion. Yet, in spite of the necessity that a chauffeur must "crank" his machine, some have not hesitated to recommend the occupation of a chauffeur. Women have, of course, various forms of housework as a more or less natural resource; and the increasing demand for nurses for tuberculous cases is indicated by the frequency with which that occupation is recommended. Training for this work can be most effectively given in sanatoria, and especially to those whose personal experience lends understanding and emphasis to the essentials in precaution and care. An incidental inference from the report is the indication of the large number of positions in sanatoria for tuberculous ex-patients. For every one hundred fifty patients, it is at present customary to provide six physicians, ten nurses, and thirty-two employees. At present only about one-third of these attendants on the patient body are tuberculous, and there is no apparent reason why this percentage may not be raised at least to seventy or eighty.

The question of occupations for men discharged from sanatoria is one of the most important yet unsolved, and it cannot be said that the reports from sanatoria have to the present time added much light. Those who have suggested farm colonies have clearly not been the sanatorium authorities, and there is yet no unanimity even as to the choice between indoor and outdoor occupations. It would seem to be probable that the risks of exposure and the usually heavier work incident to some of the latter would at least balance the limitation of free air incident to the former.

So far as a conclusion can be drawn from the varied practices and suggestions, it is rather to the effect that advice for occupation cannot be wisely given *en masse*, but must be individual, with full recognition both of the opportunities, training, and needs of the patient, and also of the character of the occupation. It has already been brought out, in other investigations and in the census, that the title of an occupation affords but slight indication of its hygienic or unhygienic character. Any occupation must be considered not only in its nature but yet more significantly in its conditions, the particular task often being entirely suitable under favorable, and entirely unsuitable under unfavorable, conditions.

Moreover, the knowledge which a patient has of an occupation familiar to him by actual experience often enables him, armed with the knowledge gained by sanatorium teaching, to determine the method by which he may pursue that occupation safely. The occupations which might perhaps be called *dilettante* are comparatively few in number, and obviously adapted to as few. The proposition once often heard that certain occupations should be reserved for those handicapped by tuberculosis, is no longer so frequently put forth now, since it is realized that there are other physical handicaps, such as heart disease, which may also well claim consideration. It is not to be forgotten that the time spent in any fixed occupation is but a fraction, and often a small fraction, of the entire time of the patient; and that it is the non-working hours to which especial attention should be given, and for which especial advice is necessary.

The final recommendation is to avoid any occupation obviously severe, exposed, or unhygienic, and to turn to occupations easy by reason of familiarity, provided that the conditions in them can be, to some extent, controlled.

ANNUAL MEETING OF THE NATIONAL ASSOCIATION

Official announcement has been made that the Ninth Annual Meeting of the National Association for the Study and Prevention of Tuberculosis will be held at the New Willard Hotel, Washington, D. C., on Thursday, Friday, and Saturday, May 8, 9, and 10, 1913.

The organization of the meeting is as follows:

Advisory Council—Dr. Charles J. Hatfield, Philadelphia, Chairman.

Sociological Section—Dr. Hoyt E. Dearholt, Milwaukee, Chairman; Dr. R. H. Bishop, Jr., Cleveland, Secretary.

Clinical Section—Dr. H. R. M. Landis, Philadelphia, Chairman.

Pathological Section—Dr. Oskar Klotz, Pittsburg, Chairman.

THE VISITING NURSE AND TUBERCULOSIS CONTROL

(*Continued from page 307*)

ditions. One commercial company introduced a visiting nurse department, and reports that the nurse picked out thirty-two men who "looked unhealthy." On medical examination, sixteen of these were found to have tuberculosis.

The average nurses need something over and above the training given in the schools. They are not properly prepared in sufficient numbers to meet all the demands made upon and for them. The training schools might well add to their curricula instruction in matters which come up in the care of the tubercular. Until such time as the schools recognize that they are educational centers for other than private nursing and institutional work, post-graduate specialized training should be secured for nurses. To meet this need, the Department of "Nursing and Health" has been established at Teachers' College.

Leading up to further intelligence on this subject, the American Association of Superintendents of Training Schools and the American Association of Nurses composed of the Alumnae Associations, recently appointed a committee to report back to them upon the standardizing of visiting nursing. This standardization is more especially needed in tuberculosis work.

The nurses who have been most efficient have acquired by experience knowlelge on a great variety of subjects related to the question of tuberculosis control, and have developed some technic for this specialty.

First—the consideration of the patient as an individual involving the treatment prescribed which in turn includes medical care, proper diet, suitable occupation, outdoor sleeping arrangement, eleemosynary aid, building up a confidence in the treatment, questions of quackery, the establishment of a daily routine that is practicable, etc., etc.—points unnecessary to elaborate at this place. The patient as an individual brings in all of the factors which have been enumerated at this Congress, excepting perhaps that of general legislation.

Second—the consideration of the patient as a member of the family, which both modifies and enlarges the consideration of the individual, and

Third—the consideration of the patient as a member of the community, which is the broadest point of view, and the one about which social workers, medical and lay, must be most concerned, since in such social consideration lies the hope of the diminution and perhaps the elimination of the tragedy of this disease.

The new motive power in the social service nurse is civic intelligence, closely akin to the mission spirit, but with a different symbolism and direction. Under this influence the nurse is becoming socialized, made a part of the community plan for communal health. The nurses grow eloquent on the futility of halfway measures. A body of intelligent seekers for economic light has been developed. They stand ready to serve and to co-operate with the social forces for this end. This develops a sense of the importance and significance of the calling, gives an impetus to acquiring skill, to observe and report social symptoms, directly linked as they are with the physical destiny of the individual patient.

The writer would urge further increase of visiting nursing in the tuberculosis campaign; the employment of nurses in the homes; that measures for treatment, relief and control be comprehensive in the hands of a sympathetic individual and the work intensive; that it be standardized, and standardized by nurses competent to apprehend the implications of their work.

The care of the premises as well as of the patient should be under the supervision of nurses who might be held responsible for the disinfection and who should supervise the labor of the unskilled, untrained and sometimes unreliable municipal employees.

Secure, if you can, the women having personality which in this instance is synonymous with an aptitude for the service and moral zeal for the cause. The "best nurse" is none too good. Make the appeal lofty enough to attract to this service those well trained of character and intelligence. Standardize the organization as well as the work of the nurse and do not be timid about high standards. The importance of the work is diminished and the "call" is belittled when the requirements are minimized and when the "cured case" is considered good enough for the service.

The nurses' organizations and some individuals in the profession have been inspired to inaugurate some of the work for the tubercular. Valor exists among many and can be developed among more, for the appeal of nursing is strong in many natures and the woman's instinct to care for the individual is capable of development for service to the community.

The record of the nurses in the control of tuberculosis can thus far be rated as good. It can be better when those engaged in the same field co-operate with them in keeping high the standards of efficiency that leaders among the nurses cherish.

A TUBERCULOSIS QUESTION BOX

Suitable questions will be answered on this page each month. No treatment will be prescribed nor medical advice given for specific cases. Such advice can be given intelligently only by the patient's own physician. Address all communications to "Question Box Editor," JOURNAL OF THE OUTDOOR LIFE, 289 Fourth Avenue, New York City. Please write only on one side of paper. Questions received before the 10th of the month will be answered the following month.

TO THE EDITOR.—Would you kindly inform me through your valuable paper if there has been any resolution passed by any body of medical authorities, or medical men singularly, as to the value of "I. K." as discovered by Dr. Cart Spengler of Switzerland?

J. C. M., Mon.

No action of the kind to which you refer has been taken by any medical authorities as far as we know. This method of treatment is still in the experimental stage.

TO THE EDITOR.—Would you advise any one to sleep on a porch with a basin of formaldehyde on a stand beside the bed?

I tried it last summer to drive away mosquitoes and have an idea that it did me some good to breathe the formaldehyde.

M. J., Poultney, Vt.

There can be no possible advantage from the breathing of formaldehyde during sleep as you suggest. Your apparent improvement was undoubtedly a coincidence.

TO THE EDITOR.—Will you kindly answer the following questions? I read the "Question Box" with much interest, and would appreciate a reply. Would tuberculin be of any benefit in tuberculosis—where it is not of the lungs and not general, in any other part of the body, as an ulcer, could it do any harm? Would "vaccine" derived from or made of the germs from the ulcer have any curative power? Could it do any harm? What effect would the vapor of iodine have on such a condition? What effect would a solution (weak) of carbolic acid have? Is there a fair possibility of healing a tubercular ulcer? Could tuberculosis in any form be caused from a run-down condition, due to overwork, when there is apparently no other cause? I enclose stamp for reply. If you think these questions and answers might be of some benefit to readers, you may publish them, but would appreciate a reply by letter.

M. J. S., Rochester, N. Y.

Your questions are too largely medical to be answered in these columns. In general, tuberculin and vaccine treatment are often valuable in just such cases of localized tuberculosis. The possibility of healing a tuberculous ulcer depends upon the individual case. It is certainly far from impossible.

Tuberculosis is caused only by infection with the tubercle bacillus. The relationship between this infection and a run-down condition is that the constitution is less able at the time to ward successfully off the infection.

TO THE EDITOR.—1. Do you believe in Dr. Freeman Hall's treatment "Tuberculozyne" as a cure for tuberculosis?

2. What is the reason that the difference between my mouth and rectal temperature is between 1½-2 degrees?

3. Why is it that I rise with 98 6-10 rectal and until 11 A. M. it mostly increases 2-10th while in the afternoon about 5 P. M. it is over 100?

4. Do you think that a moderate advanced case with six months' sanatorium experience, who is very careful, is not dangerous to the family when taking home treatment?

M. P. K., New York.

1. We know nothing about this treatment.

2. There is normally a difference of one degree between the mouth and rectal temperature. The increased difference in your case is probably due to faulty recording of the mouth temperature.

3. All temperatures are higher in the afternoon even in normal people. This tendency is more marked in cases of tuberculosis. The rise which you speak of is a very usual one.

4. It is perfectly possible for a case such as you describe to live at home without danger to the rest of the family. Whether it is so in an individual case depends entirely upon the care which is taken and the avoidance of too intimate contact, such as sleeping with other people, kissing, etc.

TO THE EDITOR.—Please answer through your Question Box the following questions:

1. Can a person be a tuberculosis carrier without having a positive sputum? If so, how can a case of tuberculosis carrier be discovered? Your article in October issue doesn't seem to answer that question.

2. Can a man, an arrested case of tuberculosis (or even a cured case) consider marriage without risking health of wife and offspring? Eugenists seem to answer no, I believe some physicians say yes. What is your opinion?

X. Y., Constant Reader.

1. The term "tuberculosis carrier" applies generally to people who have tubercle bacilli in the sputum, but no symptoms of active tuberculosis. Of course, it is possible in some instances for tubercle bacilli to discharge from the body by the urine or by the feces without their being present in the sputum. Such cases are comparatively rare.

2. There are many cases in which marriage becomes possible without risk. The decision in each individual case is a difficult medical problem. It would be a great misfortune,

however, to have it generally understood that if a person once has tuberculosis that he never will be able to marry or in other ways to become a normal member of the community.

To THE EDITOR.—Would you kindly let me have the benefit of your knowledge on the following points: (a) Is it possible to sleep out of doors in a very damp, foggy climate like Northern France, with any likelihood of profit? If so, how can the sleeper protect the bed clothes against the fog humidity? (b) Can the turn-table shelters described in Dr. Carrington's "Fresh Air" be used in wintry weather? Can you find out their cost? (c) Could you suggest an efficient means of disposing of sputum in an ordinary farm dwelling, with an out-house privy of the most primitive type, and a coal fire going only during the winter months? If tubercular sputum be kept 24 hours in a 20% carbolic solution and then thrown in a cesspool, is there any danger of infection?

F. D. W., Saranac Lake.

(a) It is possible to sleep out of doors with profit in very damp and foggy climates. This is shown by the improvement seen in the children who sleep out of doors at seaside hospitals, also in those who, living and sleeping out of doors, remain out in damp and rainy weather when the relative humidity often runs as high as 95% or 100%. The best method of protecting the bedding of the outdoor sleeper in damp weather is by using a light waterproof canvas cover wide and long enough to hang down well at the sides and end of the bed and cover all the bed clothing. This cover should be raised in order to make an air space three or four inches from the other bed clothes and held by a frame over the bed or by strings in the same manner that a mosquito bar is sometimes suspended from the ceiling. When sleeping out in a damp climate the bed clothes should be hung up and dried every morning. (b) Turn-table shelters are used during the entire winter at many European sanatoria and they cost various prices according to their size and the kind of material from which they are made. The shelter described in Dr. Carrington's book on Fresh Air can be obtained complete, including storm curtain and turn-table, from E. F. Hodgson & Co., 116 Washington Street, Boston, Mass., for $125. (c) The most effective way of disposing of the sputum would be to boil it in water for about ten minutes or to burn the sputum cups or handkerchiefs in a bonfire in the back yard. Carbolic acid does not effectively destroy the bacilli in the sputum for the reason that it coagulates the mucus which thus protects the germs from the action of the acid.

COMMUNICATIONS

The Editor will welcome under this heading discussion of various topics in which readers of the JOURNAL are interested

Would Like Suggestions

To THE EDITOR.—I should like to obtain from your readers descriptions of the methods used in the homes of tuberculosis patients for the disposal of refuse, paper sputum cups, cloths, and the contents of metal or glass sputum receptacles. I am preparing an article for the JOURNAL covering this important subject and it will be a great help to learn what is actually being done to protect homes from infection. Through the JOURNAL will you kindly ask your readers to write and tell me in what way they are disposing of waste material, particularly describing home-made devices for disinfecting, burning or otherwise destroying sputum and sputum cups.

THOMAS SPEES CARRINGTON, M. D.,
105 East 22d Street, New York.

Should a Patient Return East?

To THE EDITOR.—In your November number one of your readers from Pennsylvania asks the question whether it is necessary to remain in the West after making an arrest or an apparent cure. A five years' residence in a western health resort town, during which time I have seen a large number of consumptives, qualifies me, I think, to state that those who remain in the west do much better than those who return east. This is not absolutely the fact for I have in mind a number who made apparent cures here and are now living in the best of health in large eastern cities. Two of them have been there over six years and one four years and are to-day enjoying excellent health.

Recently I compiled some statistics which are interesting in this connection. A well known physician in a middle western city has sent in the past eleven years to the southwest something like seventy patients, divided as follows: Incipient, 23; moderately advanced, 24; and far advanced, 23. The discharge records of the institution to which they were sent show that 50 or 71% are still living, 9 or 13% are dead and the whereabouts of 11 or 16% are unknown. Of the living 31 or 62% returned to their homes and 19 or 38% remained in the west. Many of the latter entered the institution in the far advanced classification but seem to be able to live on indefinitely in the "golden climate" of the southwest and are useful citizens, working, living, dreaming the same as their more fortunate friends and acquaintances.

I came west with tuberculosis, both pulmonary and laryngeal, and am now an arrested case. With the exception of the first nine months I have worked steadily the rest of the time. I was most fortunate in obtaining a position which has placed me under the very best of conditions, and one which one consumptive in five hundred can obtain. I have thrown in my lot with the good people of the southwest and have become again a useful citizen of the republic. Not for anything would I return to the east, where I was born and reared, for I would become homesick and despondent for the sunny skies and golden days. The opportunities are so many and varied for the young man able and willing to do something that once you "hear the west calling" there is nothing else to do but pack your trunk and go "where dreams come true."

CHAS. G. GIVEN,
Silver City, N. Mex.

GLEANINGS FROM REPORTS

Seven Years in an East Side Clinic

Not often are anti-tuberculosis workers given such an opportunity to gauge the efficiency of their work, particularly that in dispensaries, as is afforded by the seven-year report of the Tuberculosis Clinic of Gouverneur Hospital, New York, with its careful records of over 2,000 cases, and its exhaustive analysis of the various clinical and social factors entering into the histories of these cases. This report of 148 pages is really an inside intimate glimpse into the everyday life of one of the most interesting clinics in New York.

Located as it is in the most densely populated section of New York on the Lower East Side at Gouverneur Slip and East River, this particular clinic in the past seven years has found an abundance of material. It has also been able to extend its influence into hundreds of homes and, entirely aside from its clinical records, has no doubt been a pronounced factor in preventing tuberculosis in this section. Some idea of the character of the population may be gained when it is noted that out of over 1,200 positive cases, 50.5 per cent. were born in Russia and only 16.8 per cent. were born in the United States. A further side-light on the population may be gained from the summary of the occupations of this same group, 457 or 37 per cent. of them being employed in the clothing trades. Fully 65 per cent. of the patients at the clinic are of the Jewish faith. Less than 10 per cent. of them use alcohol to excess. These facts, indicating a homogeneity not often found in city population, make some of the clinical studies particularly valuable.

The clinic finds that nearly 60 per cent. of the admissions are at least moderately advanced cases. Over 80 per cent. had had the disease three months before coming to the clinic. Sixty per cent. had been infected over six months. Records are available showing that nearly 25 per cent. of the cases give a history of recognized exposure to some case of tuberculosis. 20.4 per cent. of the children exposed are found on examination to be infected.

As is often the case in clinics, more than 33 per cent. of the cases cease coming in less than one month, and only 42 per cent. continue coming more than three months. Of this latter group, by which the effectiveness of dispensary treatment may in a measure be gauged, 67.4 per cent. of the first stage cases are "improved" or better and 17.9 per cent. are "apparently cured" or "arrested."

Dr. John H. Huddleston, the Director of the clinic, says: "It is apparent from the tables that practically one out of every four persons coming to the clinic is found to be not tuberculous, and yet that every fourth person comes on account of symptoms which suggest infection. An analysis of these cases illustrates some of the difficulties of diagnosis, and indicates also the importance of freeing the patient from the suspicion aroused in the minds of his friends."

Besides the careful clinical report and the special medical reports, special reports of the nursing staff and the Day and Night Camp "Westfield" and of the Women's Auxiliary are also given. The various parts of each of these reports are written by some designated representative of the staff.

New York's Health Department Clinics

Dispensary workers will find a volume entitled "The Tuberculosis Clinics and Day Camps of the Department of Health of New York" of the greatest service in suggesting methods of organizing and conducting this important form of anti-tuberculosis work. The book is written by Dr. John S. Billings, Jr., Chief of the Division of Communicable Diseases, and is No. 2 in the new Monograph series being published by the New York Department of Health.

In 1904, the New York Department of Health opened its first tuberculosis clinic. The success of this effort has so encouraged the Department that now it maintains eleven special clinics of this character in every borough of the greater city. There are 18 other tuberculosis clinics in Greater New York. Dr. Billings gives a history of each clinic and takes up also the various administrative details entering into their individual and collective management. A complete set of the forms and records used by the Department in this work is reproduced.

The report also takes up the work of the two ferryboat day camps conducted by the Department, one in Brooklyn and one in Manhattan. Carefully prepared tables giving statistical summaries of the work of each clinic for the period from January 1, 1906, to December 31, 1911, are appended.

Persons desiring copies of this book should write to the Health Department, New York City.

Is an Advanced Case Hospital Profitable?

In the sixth annual report of the Consumptives Hospital Department of the city of Boston for the year ending January 31, 1912, the anti-tuberculosis worker will find much food for reflection, particularly on the ultimate value of a municipal hospital for advanced cases where there is no law providing for compulsory detention of patients.

Boston, as the report shows, has spent $475,000 in building a hospital and day camp at Mattapan, and since 1906 has expended $673,000 on the maintenance of this institution and its adjunct dispensary. Although the report of the trustees would indicate marked success in getting advanced cases to go to the hospital and in keeping them there, the report of the medical director would seem to indicate that the percentage of advanced cases being admitted is decreasing. In 1911, out of 709 cases admitted, 586 or 83 per cent. were third stage cases, as against 92 per cent. in 1910 and 97 per cent. in 1911. Furthermore, of the 570 discharged cases last year 239 or 42 per cent. were dead, and 199 or 35 per cent. were discharged to their homes. For the year 1909, the percentage of dead cases was 60, and for the year 1910 it was 54. For the year 1909 only 14 per cent. of the total cases treated were discharged to their homes; for the year 1910, it was 18 per cent., and for the year 1911, it rose to 28 per cent. Commenting on this situation, Dr. Edwin A. Locke, Chief of Staff, says: "The fact that during the past year between one-fourth and one-third of all patients ultimately returned home indicates that much more definite efforts should be made to induce patients to remain permanently in the hospital. As previously, many of those discharged to their homes were in a dying condition and were permitted to leave the hospital at the urgent request of their families who wished them to die at home." Figures on the average length of stay of those discharged dead show 45 days in 1910 and 36 in 1911; the average stay of those discharged home was 53 days in 1910 and 38 in 1911; and the average stay for all discharged cases was 46 days in 1910 and 40 days in 1911.

The detailed and carefully prepared financial statement gives one a good idea as to the actual cost of operation. For instance, the cost per patient per day in the hospital wards was $1.73; in the day camp, 70 cents; and in the cottage ward, $1.25. The food cost per capita per diem for all patients and officers at Mattapan was 33 cents. The average per capita per diem cost to the city for patients treated in beds hired in private hospitals was $1.14.

Philadelphia Takes Stock

A recent inventory of the tuberculosis facilities of Philadelphia made by a committee of the Pennsylvania Society for the Prevention of Tuberculosis reveals the fact that the city has less than 600 beds all told for consumptives, while the average number of deaths is nearly 3,000 a year. The report was issued in July in pamphlet form by the Pennsylvania Society and is entitled "A Survey of the Tuberculosis Equipment of the City of Philadelphia with Recommendations."

After showing that the principal needs of the city were for increased hospital provision for advanced cases and more adequate control and prevention of tuberculosis in children, the report recommends ways in which more hospital beds can be secured at slight cost. This recommendation has since been acted upon. Some of the other recommendations are: "That tuberculosis dispensaries be established in the following five districts, which at present are not provided for in this way: The Gray's Ferry district, the western part of West Philadelphia, Germantown, Manayunk and Northwest Philadelphia. Furthermore, that an association of tuberculosis clinics be formed and a uniform method of treatment established.

"That an open-air school room be established in each public school in the city, and that wherever possible the school lunch be conducted in connection with the open-air school room.

"That the number of qualified school nurses be increased to 55—one for each school medical inspector. Furthermore, that 47 qualified municipal tuberculosis nurses be provided for—one to each ward in the city.

"That a committee be appointed by the Board of Education to outline a course in practical hygiene, and that this be supplemented by special lectures on tuberculosis, to be given by the school nurses, with the aid of a small health and tuberculosis exhibit.

"That several test arrests be made, in order to assist in the enforcement of the law prohibiting spitting in public places. That the compulsory registration law be enforced. That a compulsory removal law be passed."

NOTES AND NEWS

An Epidemic of Tuberculosis

Realizing that the anti-tuberculosis situation in Buffalo is serious, the Association for the Relief and Control of Tuberculosis of that city has recently petitioned the Mayor and the Board of Health to declare an epidemic of tuberculosis. The effect of such a declaration would be that the health commissioner would have power under the city charter forcibly to remove and to detain any consumptives whom he deemed dangerous to the public health. The Association took the position that the present situation in Buffalo was not merely an "impending pestilence" as the language of the charter states, but worse, that it was a pestilence already upon the city "due entirely to apathy and neglect in the past." They declared that the presence of 5,000 cases of tuberculosis in the city was sufficient to call for immediate and drastic action on the part of the Board of Health. Furthermore, they contended that the present lack of hospital facilities demanded immediate action along this line.

Although the report of the committee on this subject created a great deal of agitation, it was finally rejected by the health commissioner.

Governor Colquitt Issues Warning

Governor O. B. Colquitt of Texas, acting as Chairman of the Southwestern Conference on Tuberculosis recently addressed letters to the Governors of about thirty states, urging them to do everything in their power to keep indigent consumptives in their states from going to the Southwest in the search of health. The Governor called attention to the resolutions adopted by the Southwestern Tuberculosis Conference in which it was urged that action be taken against the sending of so many consumptives annually into the Southwestern States without sufficient funds to care for themselves.

As a result of this letter sent out by Governor Colquitt, a great deal of publicity has been given to this important subject. Practically every governor who received the letter gave it to the press. Replies have been received from almost every governor to whom the letter was sent. Copies of the Governor's letter may be obtained upon application to Mr. Robert J. Newton, Executive Secretary of the Texas Anti-Tuberculosis Association, Austin, Texas.

A Million Dollar Memorial

Toronto is considerably agitated over a proposition for a popular vote on the question of setting aside $200,000 as the city's share of a million dollar King Edward Memorial Tuberculosis Hospital for the Province of Ontario. Considerable agitation is being aroused throughout the city and in fact in all parts of the province and it is probable that a definite campaign will be arranged in the near future and a popular vote will be begun. Prominent business men in all parts of the province are leading the movement including the Governor General of Canada and the Duke of Connaught.

Would Segregate Sanatoria

Steps have been taken in Asheville, N. C., to segregate the boarding houses and sanatoria for consumptives in that health resort. An ordinance is before the City Council which makes it illegal for anyone to conduct a boarding house or a sanatorium within certain limits. The district is that which contains some of the best residences of Asheville. Considerable difficulty and confusion has arisen over the passing of this ordinance and its fate is still considerably in doubt.

Some New Open Air Schools

Open air schools have been established within the last two months in Minneapolis, New Haven, Detroit and several other places. In Minneapolis two open air schools will be opened in the very near future, accommodating approximately seventy-five pupils each The Board of Education of New Haven has also opened a new school, in a tent on the grounds of the New Haven Orphan Asylum. A memorial school has been opened in Detroit. It is probably one of the best equipped institutions of its kind in the country. Montreal has decided to have an open air school on the roof of the Montreal Tuberculosis Institute. This will be the first open air school in Canada.

Red Ribbon Day

Women connected with the St. Louis Society for the Relief and Prevention of Tuberculosis realized a considerable sum of money recently by collecting waste paper throughout the entire city. A campaign was organized and the day was set and called "Red Ribbon Day." Arrangements were made with truckmen in various parts of the state to donate their services and the movement was pushed through the newspapers. On the day announced, people in all parts of the city gathered together newspapers, periodicals and other waste paper and gave them to the Society. More than 100 tons of paper were collected in this way, and sold for paper stock to regular dealers.

Miss Gould Helps Tuberculosis Camp

With the donation of $10,000 from Miss Helen Gould, the day and night camp of the

St. Louis Society for the Prevention and Relief of Tuberculosis has become an assured fact. The camp which has just been completed, will be exclusively for women and girls in the incipient stages and will have a capacity of twenty-eight beds which will be operated throughout the year. The building consists of a two-story frame structure with two wings for fourteen patients each.

An English Training School For Nurses

To meet the demand for nurses especially trained in the care of tuberculosis patients, the authorities of the Royal Hospital for Diseases of the Chest in London, have established what is the first special training school for nurses on tuberculosis in England. The school proposes to give a thorough training by means of lectures, clinics and hospital and home work

An Anti-Tuberculosis League in Bombay

The first anti-tuberculosis league in India was recently organized at Bombay under the patronage of Governor Sir George Sydenham Clarke. The organization proposes to conduct a campaign along lines similar to those which have been taken up in this country. As a beginning of its tuberculosis work, it will open a clinic and a permanent exhibit. The National Association for the Study and Prevention of Tuberculosis has sent a considerable amount of literature to the new organization and is co-operating with them in their work. The joint honorary secretaries of the League are Drs. John A. Turner and M. A. Choksy. The organization is called the King George V. Anti-Tuberculosis League of Bombay.

Sanatorium Attracts Patients

The recent opening of the Texas State Sanatorium at Carlsbad has brought an unusual influx of indigent consumptives from all parts of the state into San Angelo which is the only city of any size near the sanatorium. So serious has the problem become that the city authorities have made arrangements to confer with county commissioners and to arrange that those who come to San Angelo in the hope of getting into the sanatorium may be sent home at the expense of their own counties when there is no place for them at the institution. Many of the cases are sent by physicians in various parts of the state to the State Sanatorium and when they arrive there, the authorities of the institution reject them because they are unsuitable for admission.

How to Keep Sick

"Education by Negation" is the method employed by the Chicago Health Department in its "Advice as to How to Keep Sick." The rules follow:

Keep the windows closed all the time, especially when you sleep—fresh air would keep you healthy.

Keep the sunshine out of your home—germs don't like sunshine.

Never take a deep breath—that would give your lungs some needed exercise, and, besides, you might rip a button off your vest.

Don't disturb the flies—you'll miss a lot of filth if you do.

Never take a bath—soap and water are enemies of disease.

Keep a dirty house—dirt and disease go hand in hand.

What's the use of being healthy, anyway?

Beware of This "Sanatorium"

Complaints have been received in New York from all parts of the country concerning the solicitation of funds to aid tuberculosis patients by the Campozone Sanatoria Society, of No. 141 West Thirty-sixth street, of which Harry Irwin Andrews is president. Many sufferers from lung diseases have been induced to pay money to the society, which is being investigated by the police. According to the *New York Herald*, the society has no sanitarium whatever, in spite of its alluring prospectuses, which are shown by collectors of funds for this "charity."

The *New York Telegram* says that Andrews was serving a term of two years and six months in Sing Sing for forgery in 1905, at the time when he states in his alluring circulars that he was being cured of consumption by the methods employed at his "sanitoria." It is alleged that he swindled the Naussau Trust Company of Brooklyn of $18,800 in 1904 by means of cleverly raised checks, and then fled to Alpena, Mich., but was caught, brought back, tried and convicted.

Sanatorium Life a la Japanese

The following letter from the Japanese friend of a California sanatorium patient to the superintendent of the sanatorium is such a rare combination of Japanese English that it may even give Wallace Irwin some points along this line. The letter was dated September 15th and hence the reference to the "great funeral."

"Dear Sir:

"I been up to see Mrs. N—— on last Sunday. She was looks so nice now. I was glad to she her when she says feel good & dont get tired. I think so better than Mr. S——.

"He is looks very fine now. We hope they get cure soon. I wanted see you thats day, But you been down city.

"We will pay to you Dr. bill thirty dollars (30.00) by check today. Well we are resting today. It is great funeral of Empire of Japan.

"I hope you take care your self.

"Write soon.

"S——."

Nursing at a Half a Million a Year

Beginning with 751 visits in June 1909, the visiting nurse service provided by the Metropolitan Life Insurance Co. for the benefit of its policyholders has been extended until in June 1912, over 76,500 visits were made. For three years the company has been providing this free nursing service in the belief that continued effort of this character will reduce the death rate among its 10,000,000 industrial policyholders, and thus eventually return to the stockholders the hundreds of thousands of dollars invested in this manner. The number of patients visited, including duplicates, in the three years ending July 1, 1912, approximates 185,000. The number of visits made by nurses to patients amounts to over 1,500,000. These visits cost the company between forty and fifty cents each. A recent report on this subject estimates the cost for the present fiscal year at fully $500,000. While it is too soon to give any definite statistics on the decline of the death rate, comparisons of the mortality rates of tuberculosis and some other diseases show an improvement to an appreciable degree.

Progress in Lexington

Favorable progress is being made by the Fayette Anti-Tuberculosis Association with headquarters at Lexington (Ky.). In 1910, Miss Chloe Jackson was appointed as visiting nurse and for six months she worked unaided at her task. In January of the following year the city and county appropriations to the work of the association were increased from $800 to $1,500 each, and sufficient additional funds were secured to effect a considerable expansion in the work. The association now operates a successful dispensary; employs three nurses, besides, Miss Jackson, the executive secretary, and conducts also a vigorous and steady educational campaign in the city and county, especially in the schools.

Has All Funds Needed

Not often does a local anti-tuberculosis society get into that comfortable position where it sees in the near future the time where it will have enough money to do its work without continued appeals to the public. Such, however, is the enviable state of the Houghton County (Mich.) Anti-Tuberculosis Society, as announced in a local paper recently. The society has a budget of about $3,000 a year. Of this money it now receives from the county $2,000 annually, and hopes soon to secure an additional $500 from municipal sources. Then it is planned to get 100 sustaining memberships of $5 each to carry the rest of the budget. Thus the organization

would not be obliged to make further appeals for funds.

Will Give Doctors More Pay

According to recent dispatches from London, the Cabinet has agreed to grant a considerable increase in the rate to be paid doctors under the Insurance Act. It is reported the $5,000,000 have been set aside annually for this purpose making possible the payment of 7s. 6d. ($1.80) per insured person a year, thus meeting the doctors half way. The doctors declared that the least they would accept was $2.04, and the Government offered $1.44, after first offering $1.08. Waldorf Astor who is chairman of the Tuberculosis Committee under the Act has been studying anti-tuberculosis methods in the United States.

Hospital and Sanatorium Jottings

The small camp conducted near Pittsfield (Mass.) for some time by the local Tuberculosis Society, will soon be enlarged through an anonymous gift of $5,000.

Considerable objection is being raised over the erection of a hospital in Westchester County (N. Y.). Among the objectors is Commissioner Thompson head of the Department of Water Supply, Gas and Electricity of New York City who says the erection of this hospital in the city's water-shed will affect its water supply.

The corner-stone for a new administration building was recently laid at Hope Farm, near Wilmington (Del.), conducted by the Delaware Anti-Tuberculosis Association. The sanatorium has grown from 8 beds in 1909 to nearly 50 at the present time.

Yonkers (N. Y.) has opened its new municipal hospital, which cost about $50,000.

The sanatorium for children with non-pulmonary tuberculosis being erected by the Texas Anti-Tuberculosis Association at Galveston, has been named "The Walter Colquitt Memorial Children's Hospital," in honor of a deceased son of Governor Colquitt.

The North Dakota State Sanatorium located at Dunseith has recently opened for the reception of patients. Dr. J. P. Widemeyer is the superintendent of the new institution.

"Nopeming Sanatorium" is the name of the new county sanatorium of St. Louis County (Minn.), recently opened near Duluth. The name means "Out in the Woods." It is the first county hospital to be opened in Minnesota.

Canadian Honor for Dr. Knopf

Dr. S. Adolphus Knopf of New York City, has been appointed Honorary President of the Medical Board of the Institut Bruchesi of Montreal. The Institut is under the direct supervision of the Archbishopric of Montreal, and works very largely among the French Canadians of that city. It conducts a dispensary, a preventorium and is planning in the near future to establish a sanatorium. Dr. Knopf is the only non-resident of Montreal who is connected with the Institut.

First County Hospital in Kentucky

Acting under the new tuberculosis law of 1911, Kenton County (Ky.) of which Covington is the county seat, held an election on November 5th on the proposition of establishing a County Tuberculosis Hospital. The proposition was carried by nearly 3,000 majority. As soon as additional assessments can be levied in the county and the taxes collected to provide funds for this sanatorium, the necessary steps for its erection will be taken. The Kenton County Anti-Tuberculosis League, under the direction of W. S. Groom, Secretary, carried on a vigorous campaign in support of the proposition and it was largely through the influence of this organization that the hospital was secured.

NOTES FROM THE FIELD

Realizing that one of the most difficult social problems it has to face is that of the indigent consumptive, the new Arizona legislation will in the near future give particular attention to this subject.

A thorough reorganization of the Anti-Tuberculosis Association of Butte (Mont.) has been effected and the work in that city is now being vigorously pushed.

The Brooklyn (N. Y.) Dental Infirmary, which was organized by the local Committee on the Prevention of Tuberculosis because the city hospitals would not admit tuberculosis patients with defective teeth, has recently been taken over by the Department of Health.

J. Byron Deacon, formerly Secretary of the Pennsylvania Society for the Prevention of Tuberculosis, has taken up his new duties as General Secretary of the Pittsburg Associated Charities.

The Ohio Society for the Prevention of Tuberculosis is making a strenuous campaign to secure an appropriation from the next legislature of $50,000 from the State Board of Health for anti-tuberculosis work.

Trenton (N. J.) has organized a Municipal Tuberculosis and Sanitation League, which has already begun an active campaign.

Practically 10,000 dahlias were disposed of on "Dahlia Day" at Tacoma on September 15th, and $400 was realized from the local anti-tuberculosis secretary.

The Berks County (Pa.) Tuberculosis Society realized about $12,000 from its Annual Tuberculosis Day collections.

Grand Rapids is working on a special campaign to secure 5,000 new members.

The Kensington Dispensary for Tuberculosis of Philadelphia, one of the oldest institutions of this kind in the country, has opened a branch clinic.

The Parks & Playgrounds Association of the City of New York, maintained 47 play centers during the summer months ending September 1st, providing safe and healthful places to play for over 30,000 children daily.

The Randall-Fichney Co. of Boston has just issued a complete catalog showing what instruments it makes and also giving some idea as to the process of manufacture.

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